U.S. DEPARTMENT OF THE INTERIOR
March 3, 1849

1876

Water Resources Data for Colorado

Volume 3. Dolores River Basin,
Green River Basin,
and San Jan River Basin

COMPLETED

469

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-80-3

WATER YEAR 1980

Prepared in cooperation with the State of Colorado
and with other agencies

CALENDAR FOR WATER YEAR 1980

1979

OCTOBER

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

NOVEMBER

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

DECEMBER

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

1980

JANUARY

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

FEBRUARY

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	

MARCH

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

APRIL

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

MAY

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

JUNE

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

JULY

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

AUGUST

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

SEPTEMBER

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

U.S. DEPARTMENT OF THE INTERIOR
March 3, 1849

1876

Water Resources Data for Colorado

Volume 3. Dolores River Basin,
Green River Basin,
and San Jan River Basin

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-80-3

WATER YEAR 1980

Prepared in cooperation with the State of Colorado
and with other agencies

1

UNITED STATES DEPARTMENT OF THE INTERIOR

JAMES G. WATT, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information on the water program in Colorado write to:

District Chief, Water Resources Division
U.S. Geological Survey
Box 25046, Mail Stop 415
Denver Federal Center
Lakewood, CO 80225

1981

PREFACE

This report was prepared by the U.S. Geological Survey in cooperation with the State of Colorado and other agencies by personnel of the Colorado District of the Water Resources Division under the supervision of J. F. Blakey, District Chief, and Alfred Clebsch, Jr., Regional Hydrologist, Central Region.

This report is one of a series issued State by State under the direction of Philip Cohen, Chief Hydrologist, Robert J. Dingman, Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for Colorado are in three volumes as follows:

Volume 1. Missouri River, Arkansas River, and Rio Grande basins in Colorado,
Volume 2. Colorado River basin in Colorado, above the Dolores River, and
Volume 3. Dolores River, Green River, and San Juan River basins in Colorado.

BIBLIOGRAPHIC DATA SHEET	1. Report No. USGS/WRD/HD-81-064	2.	3. Recipient's Accession No.
4. Title and Subtitle Water Resources Data for Colorado, Water Year 1980 Volume 3. Dolores River basin Green River basin, and San Juan River basin			5. Report Date February 1982
			6.
7. Author(s)			8. Performing Organization Rept. No. USGS-WDR-CO-80-3
9. Performing Organization Name and Address U.S. Geological Survey, Water Resources Division Box 25046, Mail Stop 415 Denver Federal Center Lakewood, CO 80225			10. Project/Task/Work Unit No.
			11. Contract/Grant No.
12. Sponsoring Organization Name and Address U.S. Geological Survey, Water Resources Division Box 25046, Mail Stop 415 Denver Federal Center Lakewood, CO 80225			13. Type of Report & Period Covered Annual--Oct. 1, 1979 to Sept. 30, 1980
			14.

15. Supplementary Notes

Prepared in cooperation with the State of Colorado and other agencies

16. Abstracts

Water-resources data for Colorado for the 1980 water year consists of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs, and water levels and water quality of wells and springs. This report (Volumes 1, 2, and 3) contains discharge records for about 460 gaging stations, stage and contents of 22 lakes and reservoirs, 4 partial-record low-flow stations, 30 crest-stage partial-record stations, and 50 miscellaneous sites; water quality for 163 gaging stations and 300 miscellaneous sites; and water levels for 55 observation wells. A few pertinent stations in bordering States also are included in this report. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of J. F. Blakey, district chief. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Colorado.

17. Key Words and Document Analysis. 17a. Descriptors

*Colorado, *Hydrologic data, *Surface water, *Ground water, *Water quality; Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses.

17b. Identifiers/Open-Ended Terms

17c. COSATI Field/Group

18. Availability Statement No restriction on distribution. This report may be purchased from: National Technical Information Service, Springfield, VA 22161	19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages 452
	20. Security Class (This Page) UNCLASSIFIED	22. Price

FORM NTIS-35 (REV. 10-73) ENDORSED BY ANSI AND UNESCO. THIS FORM MAY BE REPRODUCED USCOMM-DC 8265-P74

BEST DOCUMENT AVAILABLE

CONTENTS

Page

Preface III
List of gaging stations, in downstream order, for which records are published VII
List of observation wells, by county, for which records are published . X
Introduction. 1
Cooperation 6
Hydrologic conditions 7
Definition of terms 7
Downstream order and station number 18
Special networks and programs 19
Explanation of stage and water-discharge records. 19
  Collection and computation of data. 19
  Accuracy of field data and computed results 23
  Other data available. 24
  Records of discharge collected by agencies other than the Geological Survey 24
Explanation of water-quality records. 24
  Collection and examination of data. 24
  Water analysis. 25
  Water temperatures. 26
  Solutes 27
  Sediment. 27
  Water-supply papers 28
Explanation of ground-water-level records 29
  Collection of data. 29
  Publications. 31
Selected references 32
Publications on techniques of water-resources investigations. 35
Gaging-station records. 37
  Transmountain diversions from Colorado River basin in Colorado. . . . 437
Discharge at partial-record stations. 440
  Crest-stage partial-record stations 440
  Discharge measurements made at miscellaneous sites. 442
Specific-conductance and temperature data at selected gaging-sites. . . 443
Ground-water levels 450
Index 451

ILLUSTRATIONS

Page

Figures 1-3. Map showing:
  1. Location of lake- and streamflow-gaging stations and water-quality stations in Colorado 3
  2. Location of crest-stage partial-record stations in Colorado 4
  3. Location of observation wells in Colorado. 5
4. System for numbering wells and miscellaneous sites (latitude and longitude) 29

TABLES

Page

Table 1. Factors for conversion of chemical constituents in grams of micrograms per liter to milliequivalents per liter. 11
2. Factors for conversion of sediment concentration in milligrams per liter to parts per million. 12
3. Degrees Celsius (°C) to degrees Fahrenheit (°F) 26
4. Water-supply paper numbers and parts, water years 1941-71 . . 31

BEST DOCUMENT AVAILABLE

GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

*[Letter after station name designates type and frequency of published data.
Daily tables: (D) discharge, (C) specific conductance, (S) sediment,
(T) temperature, (e) elevation or contents, (O) dissolved oxygen, (P) pH.*

*Partial tables: (c) chemical, (b) biological, (m) microbiological,
(s) sediment, (t) temperature]*

COLORADO RIVER BASIN Page
Colorado River:
DOLORES RIVER BASIN
Dolores River below Rico (D) 37
Dolores River at Dolores (D) 38
  Disappointment Creek near Dove Creek (D) 39
Dolores River at Bedrock (DTCtc) 40
Dolores River near Bedrock (DTCtc) 43
  San Miguel River near Placerville (D) 46
    SALTADO CREEK BASIN
    Saltado Creek near Norwood (D) 47
    Beaver Creek:
    East Beaver Creek (head of Beaver Creek):
      Gurley Ditch near Norwood (D) 48
      West Beaver Creek near Norwood (D) 49
    Beaver Creek near Norwood (Dcmb) 50
    West Naturita Creek (head of Naturita Creek) at upper station, near Norwood (D) 56
    West Naturita Creek near Norwood (Dcmb) 57
      East Naturita Creek:
        Brewster Creek:
          Lilylands Canal near Norwood (D) 63
    Naturita Creek:
      Maverick Draw near Norwood (D) 64
  San Miguel River at Naturita (Dcmb) 65
  San Miguel River at Uravan (D) 72
  San Miguel River below Uravan (cm) 73
GREEN RIVER BASIN
Green River:
  Vermillion Creek near Hiawatha (Dc) 75
  Vermillion Creek at Ink Springs Ranch (Dcmb) 79
  Pot Creek near Vernal, UT (D) 84
  Bear River (head of Yampa River) near Toponas (D) 85
  Yampa River at Steamboat Springs (D) 86
    Elk River at Clark (D) 87
    Trout Creek:
      Middle Creek near Oak Creek (DcCT) 88
      Foidel Creek near Oak Creek (DcCT) 93
      Foidel Creek at mouth, near Oak Creek (DcCTSs) 97

Colorado River--Continued

GREEN RIVER BASIN--Continued

Page

- Yampa River below diversion, near Hayden (Dc) 106
  - Watering Trough Gulch near Hayden (DTCc). 109
  - Hubberson Gulch near Hayden (DTCc). 115
  - Stokes Gulch near Hayden (DcCTSs) 122
  - Elkhead Creek near Elkhead (D). 128
- Yampa River below Elkhead Creek, near Craig (c) 129
- Yampa River below Craig (c) 131
  - Williams Fork:
  - Williams Fork at mouth, near Hamilton (cm). 133
  - Milk Creek near Thornburgh (D). 135
    - Taylor Creek at mouth, near Axial (DcCT). 136
    - Wilson Creek near Axial (DcCTSs). 142
    - Jubb Creek near Axial (DcCT). 152
- Yampa River near Maybell (DcmbCTS). 158
  - Little Snake River near Slater (Dc) 169
  - Slater Fork near Slater (D) 172
- Little Snake River near Dixon, WY (Ds). 173
  - Willow Creek near Dixon, WY (D) 175
- Little Snake River near Baggs, WY (c) 176
- Little Snake River near Lily (DCmcTb) 178
- Yampa River below Little Snake River (CT) 186
- North Fork White River:
  - Lost Creek near Buford (D). 188
  - Marvine Creek near Buford (D) 189
- North Fork White River at Buford (D). 190
  - South Fork White River at Budge's Resort (D). 191
    - Wagonwheel Creek at Budge's Resort (D). 192
  - South Fork White River near Budge's Resort (D). 193
  - South Fork White River near Buford (D). 194
  - South Fork White River at Buford (D). 195
- White River above Coal Creek, near Meeker (DcCT). 196
- Coal Creek below Little Beaver Creek, near Meeker (c) 201
- White River near Meeker (D) 203
- Curtis Creek near Meeker (c). 204
- White River at Meeker (DcCT). 206
- White River below Meeker (DcmCT). 211
  - Piceance Creek below Rio Blanco (DcmCTPOSs) 219
  - Middle Fork Stewart Gulch, near Rio Blanco (DCT). 231
  - Stewart Gulch above West Fork, near Rio Blanco (DcCTPOSm) 232
    - West Fork Stewart Gulch, near Rio Blanco (DcCT) 240
      - West Fork Stewart Gulch at mouth, near Rio Blanco (DcCTSs). . . 243
      - Sorghum Gulch near Rio Blanco (DCTc). 247
    - Sorghum Gulch at mouth, near Rio Blanco (DcCTS) 250
    - Cottonwood Gulch near Rio Blanco (DcCTS). 254

Page

Colorado River--Continued
GREEN RIVER BASIN--Continued
White River--Continued

Piceance Creek tributary near Rio Blanco (DcCTSsm). 261
Scandard Gulch near Rio Blanco (DcTCm). 272
Scandard Gulch at mouth, near Rio Blanco (DCcTSm) 275

Willow Creek:

Willow Creek near Rio Blanco (DcmCTPOSs). 279
Piceance Creek above Hunter Creek, near Rio Blanco (DcmCTPOSs). . . 291
Black Sulphur Creek near Rio Blanco (DcCTSs). 303
Piceance Creek below Ryan Gulch, near Rio Blanco (DcSs) 310
Horse Draw near Rangely (DcCTS) 316
Horse Draw at mouth near Rangely (DcCTSs) 319
Piceance Creek at White River (DcCTS) 323
Corral Gulch below Water Gulch, near Rangely (DcmCTSs). 332
Dry Fork near Rangely (DcCTS) 341
Box Elder Gulch near Rangely (DcCTS). 342
Box Elder Gulch tributary near Rangely (DcCTSs) 350
Corral Gulch near Rangely (DcmCTSs) 356
Yellow Creek near White River (DcmCTSs) 366
White River above Rangely (Dcm) 375
White River near Colorado-Utah State line (DcTCSs). 379

SAN JUAN RIVER BASIN

East Fork San Juan River above Sand Creek, near Pagosa Springs (D). . 386
East Fork San Juan River near Pagosa Springs (D). 387
San Juan River at Pagosa Springs (D). 388
Rio Blanco below Blanco diversion dam, near Pagosa Springs (D). . . 389
Navajo River at Banded Peak Ranch, near Chromo (D). 390
Navajo River below Oso diversion dam, near Chromo (D) 391
Little Navajo River below Little Oso diversion dam (D). 392
Navajo River at Edith (D) 393
San Juan River near Carracas (D). 394
Middle Fork Piedra River near Dyke (D). 395
Piedra River near Arboles (D) 396

Los Pinos River:

Vallecito Creek near Bayfield (DcmT). 397
Vallecito Reservoir near Bayfield (e) 402
Los Pinos River near Bayfield (D) 403
Los Pinos River at La Boca (D). 404
Spring Creek at La Boca (D) 405
Animas River at Howardsville (D). 406
Hermosa Creek near Hermosa (D). 407
Animas River at Durango (D) 408
Florida River below Florida Farmers ditch, near Durango (D) . . . 409
Salt Creek near Oxford (D). 410
Florida River at Bondad (D) 411

Colorado River--Continued Page
SAN JUAN RIVER BASIN--Continued

Animas River near Cedar Hill, NM (D). 412
La Plata River at Hesperus (D). 413
La Plata River at Colorado-New Mexico State line (Dcmb) 414
Mancos River below Johnson Canyon, near Cortez (DcCT) 420
Mancos River near Towaoc (D). 424
Hartman Draw at Cortez (DCT). 425
McElmo Creek above Alkali Canyon, near Cortez (D) 428
Mud Creek near Cortez (D) 429
McElmo Creek below Cortez (D) 430
McElmo Creek near Colorado-Utah State line (Dcmb) 431

Page

La Plata County. 450

Moffat County. 450

Montezuma County 450

WATER RESOURCES DATA FOR COLORADO, 1980

VOLUME 1: MISSOURI RIVER, ARKANSAS RIVER, AND RIO GRANDE BASINS
VOLUME 2: COLORADO RIVER BASIN ABOVE THE DOLORES RIVER
VOLUME 3: DOLORES, GREEN, AND SAN JUAN BASINS

INTRODUCTION

Water-resources data for the 1980 water year for Colorado consists of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of wells and springs. This report (Volumes 1, 2, and 3) contains discharge records for about 460 streamflow-gaging stations, stage and contents of 22 lakes and reservoirs, 4 partial-record low-flow stations, 30 crest-stage partial-record stations, and 50 miscellaneous sites; water quality for 163 streamflow-gaging stations and 300 miscellaneous sites; and water levels for 55 observation wells. Locations of lake- and streamflow-gaging stations and water-quality stations are shown in figure 1, locations of crest-stage partial-record stations are shown in figure 2, and locations of observation wells are shown in figure 3. A few pertinent stations in bordering States also are included in this report. The records were collected and computed by the Colorado District. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Colorado.

Records of discharge and stage of streams, and contents and stage of lakes and reservoirs are published in a series of U.S. Geological Survey Water-Supply Papers entitled, "Surface-water Supply of the United States." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply paper entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1955 in an annual series of water-supply papers entitled "Water Levels and Artesian Pressures in Wells in the United States," and from 1955 to the present time, in a 5-year series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be purchased from Branch of Distribution, U.S. Geological Survey, 1200 Eads Street, Arlington, VA 22202.

Beginning with the 1961 water year, streamflow records and related data have been released by the Geological Survey in annual reports on a State-boundary basis. Beginning with the 1964 water year, water-quality records for surface and ground water have been similarly released in separate annual reports. These reports provided for rapid release of preliminary data shortly after the end of the water year. The final data were then released in the series of water-supply papers mentioned above. Beginning with the 1975 water year, water data will be released on a State-boundary basis in final form and will not be republished in the water-supply paper series. The 1975 and subsequent water year reports will be in a series which will carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report CO-80-3." These reports are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. For more information on available publications, see the section entitled, "PUBLICATIONS" on subsequent pages.

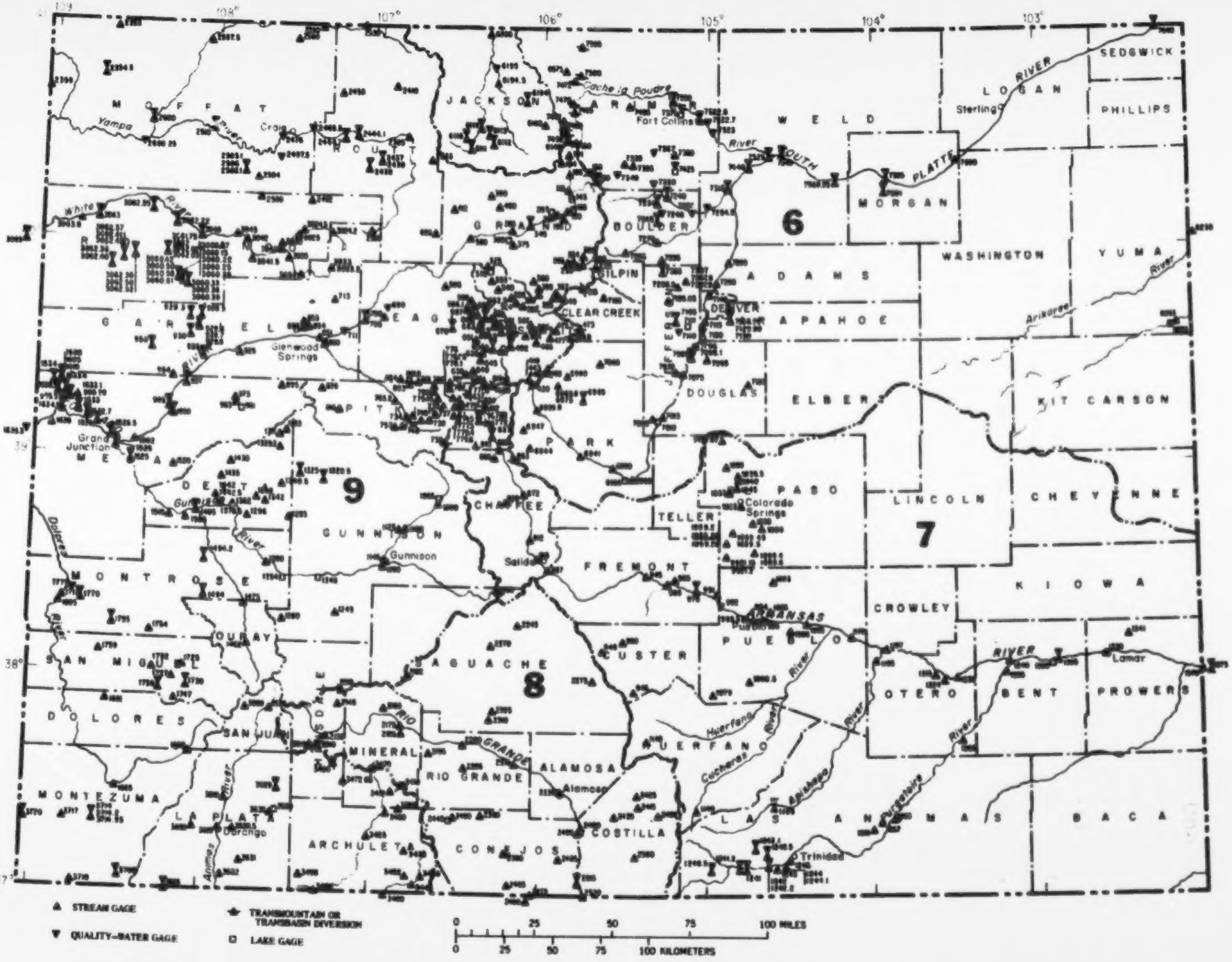

109°
108°
107°
106°
105°
104°
103°
39°
38°
37°
MOFFAT
ROUTT
JACKSON
LARIMER
WELD
LOGAN
SEDGWICK
PHILLIPS
MORGAN
RIO BLANCO
GRAND
BOULDER
GILPIN
CLEAR CREEK
ADAMS
DENVER
ARAPAHOE
WASHINGTON
YUMA
GARFIELD
EAGLE
SUMMIT
DOUGLAS
ELBERT
KIT CARSON
MESA
PITKIN
LAKE
PARK
DELTA
GUNNISON
CHAFFEE
TELLER
EL PASO
LINCOLN
CHEYENNE
MONTROSE
FREMONT
CROWLEY
KIOWA
OURAY
SAN MIGUEL
SAGUACHE
CUSTER
PUEBLO
OTERO
BENT
PROWERS
DOLORES
SAN JUAN
HINSDALE
MINERAL
RIO GRANDE
ALAMOSA
HUERFANO
MONTEZUMA
LA PLATA
ARCHULETA
CONEJOS
COSTILLA
LAS ANIMAS
BACA
6
7
8
9
Yampa
White
Colorado
Gunnison
Dolores
Animas
Cache la Poudre
SOUTH PLATTE RIVER
Arikaree
ARKANSAS RIVER
Huerfano
Cucharas
Apishapa
Purgatoire
RIO GRANDE
Craig
Sterling
Fort Collins
Glenwood Springs
Grand Junction
Gunnison
Salida
Colorado Springs
Lamar
Alamosa
Durango
Trinidad
STREAM GAGE
QUALITY-WATER GAGE
TRANSMOUNTAIN OR TRANSBASIN DIVERSION
LAKE GAGE
0 25 50 75 100 MILES
0 25 50 75 100 KILOMETERS

Figure 1.–Map showing locations of lake- and stream-gaging stations and water-quality stations in Colorado.

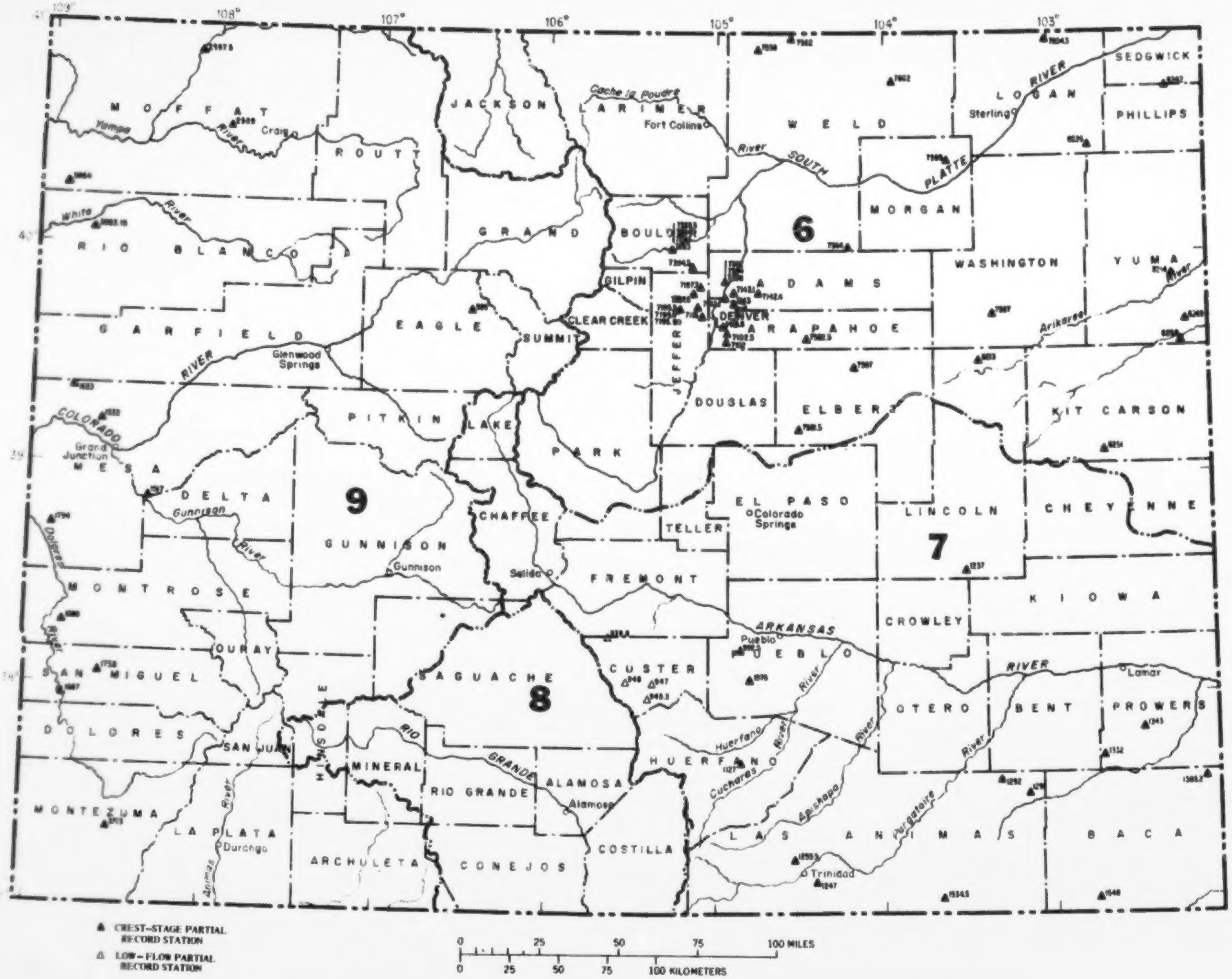

109°
108°
107°
106°
105°
104°
103°
41°
40°
39°
38°
37°
MOFFAT
Yampa River
Craig
ROUTT
JACKSON
LARIMER
Cache la Poudre
Fort Collins
WELD
SEDGWICK
LOGAN
Sterling
PHILLIPS
SOUTH PLATTE RIVER
MORGAN
RIO BLANCO
White River
GRAND
BOULDER
6
GILPIN
ADAMS
WASHINGTON
YUMA
CLEAR CREEK
DENVER
ARAPAHOE
EAGLE
SUMMIT
GARFIELD
Glenwood Springs
COLORADO RIVER
JEFFERSON
DOUGLAS
ELBERT
Arikaree River
KIT CARSON
Grand Junction
MESA
PITKIN
LAKE
PARK
DELTA
9
Gunnison River
GUNNISON
Gunnison
CHAFFEE
TELLER
EL PASO
Colorado Springs
LINCOLN
CHEYENNE
7
Salida
FREMONT
KIOWA
CROWLEY
Dolores River
MONTROSE
OURAY
ARKANSAS
Pueblo
PUEBLO
SAN MIGUEL
SAGUACHE
8
CUSTER
Lamar
RIVER
OTERO
BENT
PROWERS
DOLORES
SAN JUAN
HINSDALE
MINERAL
RIO GRANDE
Huerfano River
HUERFANO
Cucharas River
Apishapa River
Purgatoire River
ALAMOSA
Alamosa
MONTEZUMA
LA PLATA
Durango
Animas River
ARCHULETA
CONEJOS
COSTILLA
LAS ANIMAS
Trinidad
BACA
▲ CREST-STAGE PARTIAL RECORD STATION
△ LOW-FLOW PARTIAL RECORD STATION
0 25 50 75 100 MILES
0 25 50 75 100 KILOMETERS

Figure 2.—Map showing locations of crest-stage partial-record stations in Colorado.

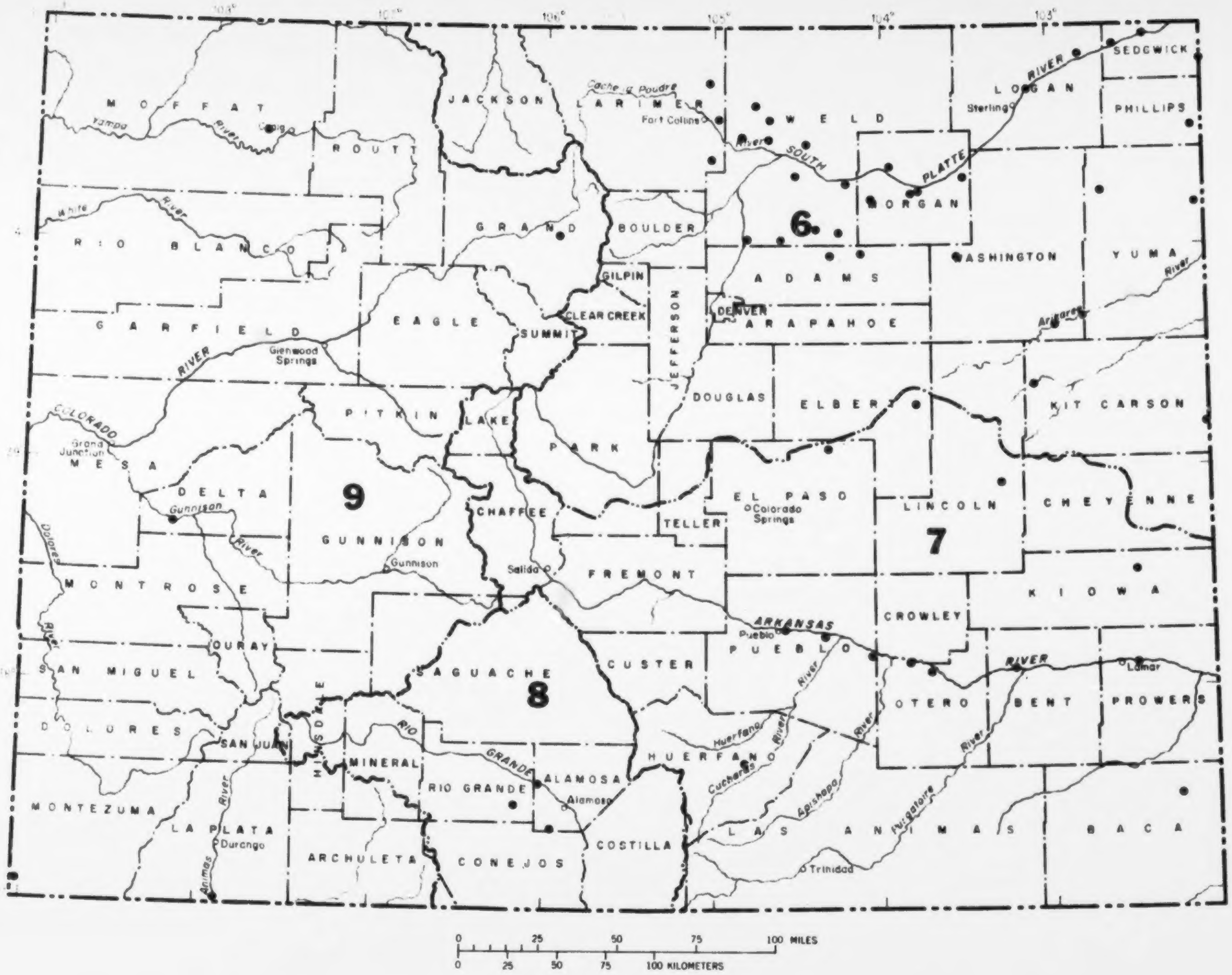

108°
107°
106°
105°
104°
103°
MOFFAT
Craig
Yampa
River
ROUTT
JACKSON
LARIMER
Cache la Poudre
Fort Collins
River
WELD
SOUTH
PLATTE
LOGAN
Sterling
RIVER
SEDGWICK
PHILLIPS
White
River
RIO BLANCO
GRAND
BOULDER
6
MORGAN
WASHINGTON
YUMA
River
GILPIN
ADAMS
GARFIELD
RIVER
Glenwood Springs
EAGLE
CLEAR CREEK
SUMMIT
JEFFERSON
DENVER
ARAPAHOE
Arikaree
COLORADO
Grand Junction
MESA
PITKIN
LAKE
DOUGLAS
ELBERT
KIT CARSON
PARK
DELTA
9
Gunnison
Dolores
GUNNISON
Gunnison
River
CHAFFEE
TELLER
EL PASO
Colorado Springs
LINCOLN
CHEYENNE
7
MONTROSE
Salida
FREMONT
KIOWA
River
OURAY
CROWLEY
ARKANSAS
Pueblo
PUEBLO
RIVER
Lamar
SAN MIGUEL
SAGUACHE
CUSTER
8
River
DOLORES
SAN JUAN
HINSDALE
RIO
GRANDE
OTERO
BENT
PROWERS
Huerfano
River
River
MINERAL
ALAMOSA
HUERFANO
River
MONTEZUMA
RIO GRANDE
Alamosa
Cucharas
Apishapa
Purgatoire
LA PLATA
Durango
Animas
River
ARCHULETA
CONEJOS
COSTILLA
LAS ANIMAS
Trinidad
BACA
0 25 50 75 100 MILES
0 25 50 75 100 KILOMETERS

Figure 3.—Map showing locations of observation wells in Colorado.

COOPERATION

The U.S. Geological Survey and organizations of the State of Colorado have had cooperative agreements for the systematic collection of surface-water records since 1895, and for water-quality records since 1941. Organizations that assisted in collecting data for this report through cooperative agreement with the Survey are:

Colorado Division of Water Resources, 'J. A. Danielson, State Engineer.
Colorado Water Conservation Board, 'J. W. McDonald, Director.
Colorado Department of Highways, 'Jack Kinstlinger, Executive Director.
Arkansas River Compact Administration, Frank G. Cooley, Chairman and Federal Representative.
Colorado River Water Conservation District, Roland C. Fischer, Secretary-Engineer.
Metropolitan Denver Sewage Disposal District No. 1, William E. Korbitz, Manager.
Northern Colorado Water Conservation District, E. F. Phipps, Secretary-Manager.
Purgatoire River Water Conservancy District, Clyde Dawn, President.
Southwestern Water Conservation District, Robert H. Tyner, Manager.
Southeastern Colorado Water Conservancy District, C. L. Thomson, General Manager.
St. Vrain and Left Hand Water Conservancy District, 'James A. Cinea, Executive Director.
City and County of Denver, Board of Water Commissioners, Charles F. Brannan, President.
Eagle County Commissioners, Dale F. Grant, Chairman.
Pitkin County Board of County Commissioners, George Ochs, County Manager.
City of Aspen, Phillip Mahoney, City Manager.
City of Aurora, C. A. Wemlinger, Director of Utilities.
Colorado City Water and Sanitation District, W. T. Hambric, District Administrator.
City of Colorado Springs, Department of Public Utilities, 'James D. Phillips, Director.
City of Fort Collins, Roger E. Krempel, Director of Utilities.
City of Glenwood Springs, 'John D. West, Manager.

Financial assistance was also provided by the U.S. Army, Corps of Engineers, U.S. Army; Bureau of Indian Affairs, Bureau of Land Management, Bureau of Mines, Water and Power Resources Service, and the National Park Service, U.S. Department of the Interior; and the U.S. Environmental Protection Agency. Organizations that supplied data are acknowledged in station descriptions.

Some records have been collected and computed by contractors in accordance with U.S. Geological Survey specifications and under Geological Survey quality control.

HYDROLOGIC CONDITIONS

Over most of the State the streamflow was slightly above normal for the entire year. The monthly mean discharges of the Yampa River at Steamboat Springs and Bear Creek at Morrison varied between 110 and 193 percent of normal for the year.

The snowpack varied from 125 percent of normal in the Yampa River and White River basins to 180 percent of normal in the San Juan and Dolores River basins. Daily temperatures were only slightly above average during the year.

Ground-water levels continued to decline in the northern High Plains, but remained constant in the alluvial river-channel aquifers.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table for converting inch-pound units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Bacteria are microscopic unicellular organisms, typically spherical, rod like, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2C° on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on M-enterrococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which the bottom of a streambed, lake, pond, reservoir, or estuary is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter (mg/L), necessary for the decomposition of organic matter by microorganisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area of volume of habitat.

Ash mass is the mass of amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and those for periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 60°C for zooplankton and 105°C for periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters. It represents a runoff of approximately 0.0372 inch from 1 square mile, or 0.3468 millimeter from 1 square kilometer.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common pigments in plants.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second (cfs, ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second, or 448.8 gallons per minute, or 0.02832 cubic meters per second.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment), that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 µm membrane filter. This may include some very small (colloidal) suspended particles as well as the amount of substance present in true chemical solution. It is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved oxygen (DO) is the dissolved-oxygen content of water in equilibrium with air and is a function of atmospheric pressure and temperature and dissolved-solids concentration of the water. The capacity of water for dissolved-oxygen decreases as dissolved solids or temperature increase or as atmospheric pressure decreases. Dissolved-solids concentration has the least effect on dissolved-oxygen concentration. Photosynthesis and respiration may cause diel variations in dissolved-oxygen concentration in water from some streams.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained. When used in connection with a discharge record, the term is applied only to those gaging stations where a continuous record of discharge is computed.

Hardness of water is the physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

Table 1.--Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*	0.11119	Iodide (I^{-1})	0.00788
Ammonia as N	.07139	Iron (Fe^{+3})*	.05372
Barium (Ba^{+2})	.01456	Lead (Pb^{+2})*	.00965
Bicarbonate (HCO_3^{-1})	.01639	Lithium (Li^{+1})*	.14411
Bromide (Br^{-1})	.01251	Magnesium (Mg^{+2})	.08226
Calcium (Ca^{+2})	.04990	Manganese (Mn^{+2})*	.03640
Carbonate (CO_3^{-2})	.03333	Nickel (Ni^{+2})*	.03406
Chloride (Cl^{-1})	.02821	Nitrate as N	.07139
Chromium (Cr^{+6})*	.11539	Nitrite as N	.07139
Cobalt (Co^{+2})*	.03394	Phosphate,ortho as P	.09686
Copper (Cu^{+2})*	.03148	Potassium (K^{+1})	.02557
Cyanide (CN^{-1})	.03844	Sodium (Na^{+1})	.04350
Fluoride (F^{-1})	.05264	Strontium (Sr^{+2})*	.02283
Hydrogen (H^{+1})	.99209	Sulfate (SO_4^{-2})	.02082
Hydroxide (OH^{-1})	.05880	Zinc (ZN^{+2})*	.03060

*Constituents reported in micrograms per liter; multiply by factor and divide results by 1,000.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Partial-record station is a particular site where limited streamflow or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Table 2.--Factors for conversion of sediment concentration in milligrams per liter to parts per million*

[All values calculated to three significant figures]

Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	1.40
24.2 - 40	1.02	234-248	1.15	443-457	1.28	652-666	1.41
40.5 - 56	1.03	250-264	1.16	460-473	1.29	668-682	1.42
56.5 - 72	1.04	266-280	1.17	476-489	1.30	684-698	1.43
72.5 - 88	1.05	282-297	1.18	492-506	1.31	700-715	1.44
88.5 -104	1.06	299-313	1.19	508-522	1.32	717-730	1.45
105 -120	1.07	315-329	1.20	524-538	1.33	732-747	1.46
121 -136	1.08	331-345	1.21	540-554	1.34	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

*Based on water density of 1.000 g/mL and a specific gravity of sediment of 2.65.

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay............	0.00024 - 0.004	Sedimentation
Silt............	.004 - .062	Sedimentation
Sand............	.062 - 2.0	Sedimentation or sieve
Gravel..........	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Periphyton is the assemblage of microorganisms attached to, and growing upon, solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms. Periphyton is a useful indicator of water quality.

Pesticide network is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams whose waters are used for irrigation or in streams in areas where potential contamination could result from the application of the commonly used insecticides and herbicides.

Pesticides are chemical compounds used to control undesirable plants and animals. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides. Insecticides and herbicides, which control insects and plants respectively, are the two categories reported.

Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.

Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.

Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per mL of sample.

Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algal mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per mL of sample.

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 disintegrations per minute (dpm).

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Radiochemical network is a network of regularly sampled water-quality stations where samples are collected monthly or twice a year (at high and low flow) to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Radioisotopes are isotopic forms of an element that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight, but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus. For example: Ordinary chlorine is a mixture of isotopes having atomic weights 35 and 37, with the natural mixture having atomic weight about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron (Rose and Rose, 1966). There are 275 isotopes of the 81 stable elements in addition to over 800 radioactive isotopes.

Radioisotopes that are determined in this program are natural uranium in µg/L (micrograms per liter), radium as radium-226 in PC/L (pCi/L, picocuries per liter), gross beta radiation as equivalent strontium/yttrium-90 or cesium-137 in PC/L, and gross alpha radiation as micrograms of uranium equivalent per liter (µg/L). Gross alpha and beta radioactivity associated with the fine-grained (silt and clay-sized) sediments in the samples are also determined.

Recoverable from bottom material the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft (0.09 m) above the bed) expressed as milligrams of dry sediments per liter of water-sediment mixture (mg/L).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge in cfs times concentration in mg/L times 0.0027.

Suspended-sediment load is that quantity of suspended sediment passing a section in a specified period.

Total sediment discharge or *total sediment load* is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry weight or volume, that passes a section during a given time.

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. This ratio should be known especially for water used for irrigating farmland.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks and is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in micromhos per centimeter at 25°C. Specific conductance is related to the number and specific chemical types of ions in solution and can be used for approximating the dissolved-solids content in the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Suspended, recoverable the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 µm membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 µm membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Thermograph is a thermometer that continuously and automatically records, on a chart, the water temperature of a stream. "Temperature recorder" is the term used to indicate the location of the thermograph.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the water year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration in milligrams per liter by 0.00136.

Tons per day is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

> Total in bottom material the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."
>
> Total, recoverable the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Water year in the U.S. Geological Survey is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1979, is called the "1980 water year."

Weighted average is used in this report to indicate the discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WRD is an abbreviation for "Water-Data Report" in the summary REVISIONS paragraph to refer to State annual basic-data reports published prior to 1975.

WDR is used as an abbreviation for "Water-Resources Data" in the summary REVISIONS paragraph to refer to State annual basic-data reports published after 1975.

WSP is used as an abbreviation for "Water-Supply Paper" in reference to previously published reports.

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifers.

DOWNSTREAM ORDER AND STATION NUMBER

Stations are listed in a downstream direction along the main stream, and stations on tributaries are listed between stations on the main stream in the order in which those tributaries enter the main stream. Stations on tributaries entering above all mainstream stations are listed before the first mainstream station. Stations on tributaries to tributaries are listed in a similar manner. In the list of gaging stations in the front of this report the rank of tributaries is indicated by indention, each indention representing one rank.

As an added means of identification, each gaging station and each partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and continuous-record gaging stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Water-quality stations located at or near gaging stations or partial-record stations have the same number as the gaging or partial-record station.

Gaps are left in the sequential allocation of numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 07083000, which appears just to the left of the station name, includes the 2-digit part number "07" plus the 6-digit downstream order number "083000." In this report the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are for Part 6 (Missouri River basin), Part 7 (Lower Mississippi River basin), and Part 8 (Western Gulf of Mexico basins). Records for Part 9 (Colorado River Basin) are in Volumes 2 and 3. All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins which have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin.

Irrigation-network stations are water-quality stations located at or near certain streamflow gaging stations west of the main stem of the Mississippi River. Data collected at these stations are used to evaluate the chemical quality of surface waters used for irrigation and the changes resulting from the drainage of irrigated lands. Prior to water year 1966, the data for these stations were published in the annual Water-Supply Paper series, "Quality of Surface Water for Irrigation, Western States."

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are: (1) To depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis, and (2) to detect and assess long-term changes in streamflow and stream quality.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and Computation of Data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at 5-, 15-, 30- or 60-minute intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the U.S. Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by hydrologists and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and winter discharge measurements, consideration being given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, adjoining good record, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Records are published for the water year, which begins on October 1 and ends on September 30. A calendar for the current water year is shown on the inside of the front cover to facilitate finding the day of the week for any date.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. Periods for which there are published records for the present station or for stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge are affected by the revisions, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given.

The type of gage currently in use, the datum of the present gage above mean sea level, referred to National Geodetic Vertical Datum; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." In references to datum of gage, the phrase "mean sea level" denotes "Sea Level Datum of 1929" as used by the Topographic Division of the Geological Survey unless otherwise qualified. National Geodetic Vertical Datum is explained in "DEFINITION OF TERMS."

Information pertaining to the accuracy of the discharge records, to conditions which affect the natural flow of the gaging station, availability of water-quality records, and reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE;" it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance.

The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or minimum contents), and the minimum gage height, if it is significant, are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second (ft^3/s) during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month.

Discharge for the month also may be expressed in acre-feet (line headed "AC-FT"). In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage-height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-discharge relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations and at miscellaneous sites follow the information for continuous record sites. Data for partial-record discharge stations are presented in three tables. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at miscellaneous sites.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good" means within 10 percent; and "fair" within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second (ft^3/s) for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. However, because all the effects cannot be measured or evaluated, satisfactory adjustments generally cannot be made. For some stations, available figures of diversions or change in contents of reservoirs are included as supplemental data. Even at those stations where adjustments can be made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Data Available

Information of a more detailed nature than that published for most of the gaging stations, such as observations of water temperatures, discharge measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of Discharge Collected by Agencies other than the Geological Survey

Records of discharge not published by the Geological Survey were collected at many sites in Colorado during the water year by the following agencies: City of Colorado Springs; Colorado Division of Water Resources; Forest Service, U.S. Department of Agriculture; City and County of Denver, Board of Water Commissioners; National Weather Service, Department of Commerce; and Water and Power Resources Service, U.S. Department of the Interior.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Water samples for analyses usually are collected at or near streamflow-gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data, the period of daily record for parameters that are measured on a daily basis (such as, specific conductance, pH, dissolved oxygen, water temperature, sediment discharge), extremes for the period of daily record, extremes for current year, and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling, or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Analysis

Most methods for collecting and analyzing water samples are described in "U.S. Geological Survey Techniques of Water-Resources Investigations," which are listed on page 35.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling, as much as possible, consistent wth available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field determination of carbonate and bicarbonate in the laboratory.

Prior to the 1968 water year, data for chemical constituents and concentrations of suspended sediment were reported in parts per million (ppm) and water temperatures were reported in degrees Fahrenheit (°F). In October 1967, the Geological Survey began reporting data for chemical constituents and concentrations of suspended sediment in milligrams per liter (mg/L) and water temperatures in degrees Celsius (°C). In waters with a density of 1.000 grams per milliliter (g/mL), parts per million and milligrams per liter can be considered equal. In waters with a density greater than 1.000 g/mL, values in parts per million should be multiplied by the density to convert to milligrams per liter. Temperature reported in degrees Celsius may be converted to degrees Fahrenheit by using table 3.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

Water Temperatures

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for surface-water stations. For stations where water temperatures are taken manually the water temperatures are taken at about the same time each day. Large streams have a small diel temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges. At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published.

Table 3.--Degrees Celsius (°C) to degrees Fahrenheit (°F)*
(Temperature reported to nearest 0.5°C)

°C	°F	°C	°F	°C	°F	°C	°F	°C	°F
0.0	32	10.0	50	20.0	68	30.0	86	40.0	104
.5	33	10.5	51	20.5	69	30.5	87	40.5	105
1.0	34	11.0	52	21.0	70	31.0	88	41.0	106
1.5	35	11.5	53	21.5	71	31.5	89	41.5	107
2.0	36	12.0	54	22.0	72	32.0	90	42.0	108
2.5	36	12.5	54	22.5	72	32.5	90	42.5	108
3.0	37	13.0	55	23.0	73	33.0	91	43.0	109
3.5	38	13.5	56	23.5	74	33.5	92	43.5	110
4.0	39	14.0	57	24.0	75	34.0	93	44.0	111
4.5	40	14.5	58	24.5	76	34.5	94	44.5	112
5.0	41	15.0	59	25.0	77	35.0	95	45.0	113
5.5	42	15.5	60	25.5	78	35.5	96	45.5	114
6.0	43	16.0	61	26.0	79	36.0	97	46.0	115
6.5	44	16.5	62	26.5	80	36.5	98	46.5	116
7.0	45	17.0	63	27.0	81	37.0	99	47.0	117
7.5	45	17.5	63	27.5	81	37.5	99	47.5	117
8.0	46	18.0	64	28.0	82	38.0	100	48.0	118
8.5	47	18.5	65	28.5	83	38.5	101	48.5	119
9.0	48	19.0	66	29.0	84	39.0	102	49.0	120
9.5	49	19.5	67	29.5	85	39.5	103	49.5	121

*°C=5/9(°F-32°) or °F=9/5(°C)+32°.

In October 1968, the Geological Survey began reporting many of the chemical constituents as well as the minor elements in micrograms per liter instead of milligrams per liter. See "Definition of Terms," and table 5 for converting English units to SI units.

The biological information includes qualitative and quantitative analyses of plankton, periphyton, Chlorophyll a and b, biomass and bottom organisms. Microbiological information includes quantitative identification of selected bacteriological indicator organisms.

Solutes

Most methods for collecting and analyzing water samples to determine the kinds and concentrations of solutes are described by Brown, Skougstad, and Fishman (1970). Analysis of pesticides and organic substances in water are described by Goerlitz and Lamar (1967), Lamar, Goerlitz, and Law (1965), and Goerlitz and Brown (1972). The collection and analysis of aquatic, biological, and microbiological samples are described by Slack and others (1973).

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge. A blank in the daily mean concentration column of the suspended-sediment discharge table indicates the value in the sediment discharge column was estimated. A zero value in the sediment-discharge column when there are nonzero values in the mean discharge and mean concentration columns indicates the load is less than 0.005 ton per day.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the streams.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

WATER-SUPPLY PAPERS

The annual series of Water-Supply Papers that give information on quality of surface waters in Colorado are shown in the following table:

Table 4.--Water-Supply Paper numbers and parts, water years 1941-71

Year	Part 6	Part 7	Part 8	Part 9	Irrigation (1951-65)[a]
1941	942	942	942	942	----
1942	950	950	950	950	----
1943	970	970	970	970	----
1944	1022	1022	1022	1022	----
1945	1030	1030	1030	1030	----
1946	1050	1050	1050	1050	----
1947	1102	1102	1102	1102	----
1948	1132	1133	1133	1133	----
1949	1162	1163	1163	1163	----
1950	1187	1188	1188	1189	----
1951	1198	1199	1199	1200	1264
1952	1251	1252	1252	1253	1362
1953	1291	1292	1292	1293	1380
1954	1351	1352	1352	1353	1430
1955	1401	1402	1402	1403	1465
1956	1451	1452	1452	1453	1485
1957	1521	1522	1522	1523	1524
1958	1572	1573	1573	1574	1575
1959	1643	1644	1644	1645	1699
1960	1743	1744	1744	1745	1746
1961	1883	1884	1884	1885	1886
1962	1943	1944	1944	1945	1946
1963	1949	1950	1950	1951	1952
1964	1956	1957	1957	1958	1960
1965	1963	1964	1964	1965	1967
1966	1993	1994	1994	1995	----
1967	2013	2014	2014	2015	----
1968	2095	2096	2097	2098	----
1969	2145	2146	2147	2148	----
1970	2155	2156	2157	2158	----
1971	2165	[b]2166	[b]2167	[b]2168	----

[a] Annual series, "Quality of Surface Waters for Irrigation, Western States."

[b] In preparation.

Information about reports and other data on quality of water in Colorado may be obtained from the district office at the address given on the back of the title page of this report.

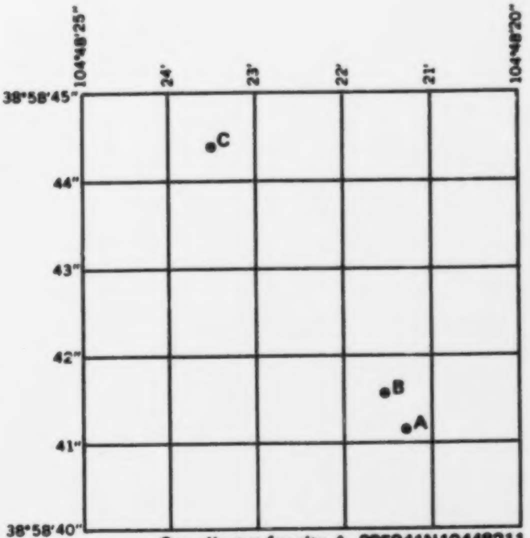
EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Collection of Data

Only ground-water level data from a basic national network of observation wells are published herein. These water-level measurements are intended to provide a record of water-level changes in important aquifers.

The locations of wells are referenced by two systems. One system is based on latitude and longitude, and the second is based on the U.S. Bureau of Land Management system of land subdivision. The latitude and longitude grid system facilitates machine processing of data and plotting of data points.

The latitude and longitude grid system is used to provide the geographic location of each well. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude; N designates north; the next seven digits denote degrees, minutes, and seconds of longitude; and the last digit is a sequential number for wells within a 1-second grid, as shown below in figure 4.



Coordinates for site	A	385841N10448211
	B	385841N10448212
	C	385844N10448230

Figure 4.--System for numbering wells and miscellaneous sites (latitude and longitude).

The local well number locates a well within a 10-acre (4.0-ha) tract using the U.S. Bureau of Land Management system of land subdivision. The components of the local well number proceed from the largest to the smallest land subdivisions. This is in contrast to the legal description, which proceeds from the smallest to the largest land subdivision. The largest subdivision is the survey. Colorado is governed by three surveys: The Sixth Principal Meridian Survey (S), the New Mexico Survey (N), and the Ute Survey (U). Costilla County was not included in any of the above official surveys. This report follows the convention of the Costilla County Assessor in which the northern part of the county is governed by the Sixth Principal Meridian Survey and the southern part of the county is governed by a local system called the Costilla Survey (C). The first letter of the well location designates the survey.

A survey is subdivided into four quadrants formed by the intersection of the baseline and the principal meridian. The second letter of the well location designates the quadrant: A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. A quadrant is subdivided in the north-south direction every 6 mi (10 km) by townships and is subdivided in the east-west direction every 6 mi (10 km) by ranges. The first number of the well location designates the township and the second number designates the range.

The 36-mi^2 (93-km^2) area described by the township and range designation is subdivided into 1-mi^2 (2.59-km^2) areas called sections. The sections are numbered sequentially. The third number of the well location designates the section. The section, which contains 640 acres (259 ha), is subdivided into quarter sections. The 160-acre (64.8-ha) area is designated by the first letter following the section: A indicates the northeast quarter, B the northwest, C the southwest, and D the southeast. The quarter section is subdivided into quarter-quarter sections. The 40-acre (16.2-ha) area is designated in the same manner by the second letter following the section. The quarter-quarter section is subdivided into quarter-quarter-quarter sections. The 10-acre (4.0-ha) area is designated in the same manner by the third letter following the section. If more than one well is located within the 10-acre (4.0-ha) tract, the wells are numbered sequentially in the order in which they were originally inventoried. If this number is necessary, it will follow the three-letter designation.

The local number is provided for continuity with older reports.

Measurements are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well insure that measurements at each well are of consistent accuracy and reliability.

Water-level measurements in this report are given in feet with reference to either mean sea level (msl) or land-surface datum (lsd). Mean sea level is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum above mean sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Publications

Publication of ground-water level data for the United States in water-supply papers was begun by the Geological Survey in 1935. From 1935 through 1939, a single water-supply paper covering the entire nation was issued each year (Water-Supply Papers 777, 817, 840, 845, and 886). From 1940 through 1974, separate water-supply papers were issued for six sections of the United States. Water-level data for Colorado are included in the water-supply papers listed below, each report containing one or more calendar years (January through December) of data. Data in this report are for the 12-month water year ending September 30.

Calendar year	WSP no.	Calendar year	WSP no.	Calendar year	WSP no.	Calendar year	WSP no.
1940	910	1945	1027	1950	1169	1955	1408
1941	940	1946	1075	1951	1195	1956-60	1760
1942	948	1947	1100	1952	1225	1961-65	1845
1943	990	1948	1130	1953	1269	1966-70	1980
1944	1020	1949	1160	1954	1325		

Information about reports and other data on ground water in Colorado may be obtained from the district office at the address given on the back of the title page of this report.

SELECTED REFERENCES

The following publications are available for background information on the methods for collecting, analyzing, and evaluating the chemical and physical properties of surface waters:

American Public Health Association, and others, 1971, Standard methods for the examination of water and waste water, 13th ed: American Public Health Assoc., New York, 874 p.

Barker, F. B., and Johnson, J. O., 1964, Determination of radium in water: U.S. Geological Survey Water-Supply Paper 1696-B, 29 p.

Barker, F. B., and others, 1965, Determination of uranium in natural water: U.S. Geological Survey Water-Supply Paper 1696-C, 25 p.

Barker, F. B., and Robinson, B. P., 1963, Determination of beta activity in water: U.S. Geological Survey Water-Supply Paper 1969-A, 32 p.

Barnett, P. R., and Mallory, E. C., Jr., 1971, Determination of minor elements in water by emission spectroscopy: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter A2, 31 p.

Brown, Eugene, Skougstad, M. W., and Fishman, M. J., 1970, Methods for collection and analysis of water samples for dissolved minerals and gases: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter A1, 160 p.

Carter, R. W., and Davidian, Jacob, 1968, General procedures for gaging streams: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6, 13 p.

Clarke, F. W., 1924, The composition of the river and lake waters of the United States: U.S. Geological Survey Professional Paper 135, 199 p.

Colby, B. R., 1963, Fluvial sediments--a summary of source, transportation, deposition, and measurements of sediment discharge: U.S. Geological Survey Bulletin 1181-A, 47 p.

Colby, B. R., and Hembree, C. H., 1955, Computations of total sediment discharge, Niobrara River near Cody, Nebraska: U.S. Geological Survey Water-Supply Paper 1357, 187 p.

Colby, B. R., and Hubbell, D. W., 1961, Simplified methods for computing total sediment discharge with the modified Einstein procedure: U.S. Geological Survey Water-Supply Paper 1593, 17 p.

Collins, W. D., and Howard, C. S., 1928, Quality of water of Colorado River in 1925-26: U.S. Geological Survey Water-Supply Paper 596-B, p. 33-43.

Corbett, D. M., and others, 1943, Stream-gaging procedure, a manual describing methods and practices of the Geological Survey: U.S. Geological Survey Water-Supply Paper 888, 245 p.

Goerlitz, D. F., and Brown, Eugene, 1972, Methods for analysis of organic substances in water: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter A3, 40 p.

Goerlitz, D. F., and Lamar, W. L., 1967, Determination of phenoxy acid herbicides in water by electron-capture and microcoulemetric gas chromatography: U.S. Geological Survey Water-Supply Paper 1817-C, 21 p.

Gregg, D. O., and others, 1961, Public water supplies of Colorado (1959-60): Fort Collins, Colorado State University Agricultural Experiment Station, General Service 757, 128 p.

Guy, H. P., 1970, Fluvial sediment concepts: U.S. Geological Survey Techniques of Water-Resources Investigation, Book 3, Chapter C1, 55 p.

_____1969, Laboratory theory and methods for sediment analysis: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter C1, 57 p.

Guy, H. P., and Norman, V. W., 1970, Field methods for measurement of fluial sediment: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter C2, 59 p.

Hem, John D., 1970, Study and interpretation of the chemical characteristics of natural water, 2d ed.: U.S. Geological Survey Water-Supply Paper 1473, 363 p.

Howard, C. W., 1955, Quality of water of the Colorado River, 1925-40: U.S. Geological Survey open-file report, 103 p.

Iorns, W. V., and others, 1964, Water resources of the Upper Colorado River basin--basic data: U.S. Geological Survey Professional Paper 442, 1,036 p.

_____1965, Water Resources of the Upper Colorado River basin--technical report: U.S. Geological Survey Professional Paper 441, 370 p.

Lamar, W. L., Goerlitz, D. F., and Law, L. M., 1965, Identification and measurement of chlorinated organic pesticides in water by electroncapture gas chromatography: U.S. Geological Survey Water-Supply Paper 1817-B, 12 p.

Lane, E. W., and others, 1947, Reports of Subcommittee on terminology: American Geophysical Union Transaction, v. 28, p. 937.

Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geological Survey Water-Supply Paper 1541-A, 29 p.

Lohman, S. W., and others, 1972, Definitions of selected ground-water terms--revisions and conceptual refinements: U.S. Geological Survey Water-Supply Paper 1988, p. 2.

McGuinness, C. L., 1963, The role of ground water in the national water situation: U.S. Geological Survey Water-Supply Paper 1800, 1121 p.

Meinzer, O. E., 1923, The occurrence of ground water in the United States: U.S. Geological Survey Water-Supply Paper 489, 321 p.

_____1923, Outline of ground-water hydrology, with definitions: U.S. Geological Survey Water-Supply Paper 494, 71 p.

Porterfield, George, 1972, Computations of fluvial-sediment discharge: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter C3, 66 p.

Ritter, J. R., and Helley, E. J., 1969, Optical method for determining particle sizes of coarse sediment: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter C3, 33 p.

Rose, Arthur, and Rose, Elizabeth (Gates), 1966, The condensed chemical dictionary: New York, Reinhold Publication Corporation, 7th edition, 1044 p.

Slack, K. V., and others, 1973, Methods for collection and analysis of aquatic biological and microbiological samples: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter A4, 165 p.

Stabler, Herman, 1911, Some stream waters of the Western United States: U.S. Geological Survey Water-Supply Paper 274, 188 p.

U.S. Inter-Agency Committee on Water Resources, A study of methods used in measurements and analysis of sediment loads in streams:

Report 11, 1957, The development and calibration of visual accumulation tube: St. Anthony Falls Hydraulic Lab., Minneapolis, Minn., 109 p.

Report 12, 1957, Some fundamentals of particle-size analysis: Washington, D. C., U.S. Government Printing Office, 55 p.

Report AA, 1959, Federal Inter-Agency sedimentation instruments and reports: St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn., 41 p.

Report 13, 1961, The single-stage sampler for suspended sediment: Washington, D. C., U.S. Government Printing Office, 105 p.

Report 14, 1963, Determinations of fluvial sediment discharge: Washington, D. C., U.S. Government Printing Office, 151 p.

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations".

1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-C1. *Fluvial sediment concepts*, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment*, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. *Some statistical tools in hydrology*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. *Frequency curves*, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. *Low-flow investigations*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply*, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics*, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. *Computation of rate and volume of stream depletion by wells*, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments*, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy*, by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. *Methods for analysis of organic substances in water*, by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples*, edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

8-A1. *Methods of measuring water levels in deep wells*, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

09165000 DOLORES RIVER BELOW RICO, CO

LOCATION.--Lat 37°38'20", long 108°03'35", Dolores County, Hydrologic Unit 14030002, on left bank at upstream side of Montelores bridge northwest of State Highway 145 (relocated), at Dolores-Montezuma County line, 0.5 mi (0.8 km) upstream from Ryman Creek, and 4.0 mi (6.4 km) southwest of Rico.

DRAINAGE AREA.--105 mi² (272 km²).

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,422.23 ft (2,567.096 m), National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--29 years, 132 ft³/s (3.738 m³/s), 95,630 acre-ft/yr (118 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,120 ft³/s (60.0 m³/s) June 10, 1952, gage height, 6.15 ft (1.875 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Nov. 16, 17, 1956, Feb. 6, 7, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft³/s (23 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 23	2100	1,050	29.7	4.74	1.445	June 10	2300	*1,770	50.1	5.57	1.698

Minimum daily discharge, 11 ft³/s (0.31 m³/s) Feb. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	22	17	14	13	14	15	200	923	811	86	44
2	23	25	16	15	13	14	16	170	909	790	82	41
3	24	24	18	14	14	14	16	182	965	612	78	39
4	25	22	18	15	16	14	17	216	1070	520	75	38
5	25	22	19	14	14	13	17	267	1330	445	72	38
6	25	20	19	15	14	14	18	294	1390	382	68	40
7	25	22	20	14	14	14	18	326	1240	370	68	47
8	24	23	20	14	13	13	16	350	1240	340	72	46
9	24	22	20	14	12	13	19	358	1460	300	70	62
10	23	22	20	14	12	13	23	290	1520	280	61	146
11	24	20	19	14	11	13	28	267	1550	260	58	170
12	23	20	18	15	12	13	25	243	1500	240	62	97
13	22	22	17	16	12	12	25	198	1440	250	65	79
14	22	22	17	16	13	12	30	192	1330	230	62	66
15	22	22	17	16	14	13	39	180	1200	210	76	60
16	21	22	17	16	15	13	50	170	1170	190	62	55
17	21	23	18	16	16	13	71	195	1100	170	55	51
18	24	22	18	15	19	14	96	213	1310	160	51	49
19	24	22	18	15	19	14	128	261	1340	150	48	46
20	26	22	17	15	17	15	178	302	1210	140	46	45
21	35	22	17	14	16	15	225	570	1160	130	46	43
22	25	22	17	14	16	15	270	708	1150	130	52	41
23	27	20	17	13	15	15	252	874	1140	130	75	40
24	29	20	17	13	15	16	202	804	1100	130	97	39
25	28	22	16	14	14	17	170	588	1050	140	109	39
26	27	22	16	14	14	18	185	552	1040	140	73	38
27	25	22	16	14	14	19	190	570	1000	140	60	38
28	23	20	16	14	14	17	216	666	895	100	55	38
29	25	19	16	14	14	16	255	804	783	110	51	36
30	23	18	15	14	---	15	252	888	762	111	47	35
31	22	---	15	14	---	15	---	916	---	92	46	---
TOTAL	760	648	541	449	415	446	3062	12918	35357	8193	2028	1646
MEAN	24.5	21.6	17.5	14.5	14.3	14.4	102	416	1179	264	65.4	54.9
MAX	35	25	20	16	19	19	270	916	1550	811	109	170
MIN	21	18	15	13	11	12	15	170	762	92	46	35
AC-FT	1510	1290	1070	891	823	885	6070	25610	70130	16250	4020	3260

CAL YR 1979 TOTAL 69031 MEAN 189 MAX 1460 MIN 13 AC-FT 136900
WTR YR 1980 TOTAL 66455 MEAN 182 MAX 1550 MIN 11 AC-FT 131800

NOTE.--NO GAGE-HEIGHT RECORD JAN. 9 TO MAR. 23.

09166500 DOLORES RIVER AT DOLORES, CO

LOCATION.--Lat 37°28'10", long 108°30'15", in NE¼NE¼ sec.16, T.37 N., R.15 W., Montezuma County, Hydrologic Unit 14030002, on left bank 70 ft (21 m) downstream from bridge on State Highway 184 in Dolores and 0.4 mi (0.6 km) upstream from Lost Canyon Creek.

DRAINAGE AREA.--504 mi² (1,305 km²).

PERIOD OF RECORD.--June 1895 to October 1903, August 1910 to November 1912, October 1921 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 859: 1937. WRD Colo. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,918.74 ft (2,108.832 m), National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Oct. 7, 1952.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,000 acres (8.1 km²) above station. Flow partly regulated by Ground Hog Reservoir, capacity, 21,710 acre-ft (26.8 hm³/yr). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--69 years (water years 1896-1903, 1911-12, 1922-80), 428 ft³/s (12.12 m³/s), 310,100 acre-ft/yr (382 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft³/s (283 m³/s) Oct. 5, 1911, gage height, 10.2 ft (3.11 m), site and datum then in use, from rating curve extended above 2,800 ft³/s (79 m³/s); minimum daily, 8.0 ft³/s (0.23 m³/s) Aug. 16, 1896.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, that of Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft³/s (51 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 22	2200	2,140	60.6	7.00	2.134	May 26	0330	4,240	120	8.47	2.582
Apr. 29	2330	2,390	67.7	7.23	2.204	June 11	0430	*4,900	139	8.94	2.725
May 8	0100	2,940	83.3	7.68	2.341						

Minimum daily discharge, 39 ft³/s (1.10 m³/s) Oct. 5, 8-10, 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	43	44	46	42	55	57	1900	3000	1990	394	305
2	42	43	46	46	44	55	74	1390	2750	1700	381	294
3	42	49	48	44	44	55	66	1420	2910	1450	373	284
4	41	58	50	44	46	55	68	1650	3200	1280	361	298
5	39	48	50	46	46	55	88	1860	3480	1120	349	291
6	41	47	48	44	44	55	100	1980	3670	1010	341	294
7	41	56	48	44	44	55	112	2300	3330	907	343	288
8	39	57	48	44	44	55	108	2640	3170	970	377	288
9	39	57	48	44	42	60	128	2320	3570	870	394	302
10	39	51	48	46	42	65	172	1910	4110	774	373	390
11	40	42	48	44	42	77	223	2280	4190	705	357	560
12	39	42	46	46	44	74	199	1850	3900	680	349	329
13	39	49	46	46	46	68	202	1520	3700	665	361	235
14	41	52	44	46	46	61	256	1430	3240	675	361	179
15	41	56	44	46	48	71	385	1420	3000	588	398	148
16	42	57	44	44	48	72	516	1360	2840	525	381	132
17	42	51	46	44	48	64	625	1980	2710	480	345	118
18	41	60	46	44	50	65	798	1640	2930	457	329	108
19	42	51	46	46	50	71	1020	1860	2950	493	321	102
20	48	52	46	46	50	76	1200	2260	2720	480	309	100
21	88	43	48	42	50	77	1630	2820	2480	444	305	95
22	76	44	48	42	50	86	1960	3500	2370	412	298	92
23	59	44	46	42	50	84	1830	3790	2280	412	298	89
24	59	46	44	42	48	78	1500	3500	2230	412	345	84
25	61	48	44	44	48	83	1230	2900	2110	426	466	83
26	61	50	46	46	48	61	1440	2400	2070	484	430	88
27	59	50	48	46	50	82	1520	2320	2010	436	381	78
28	58	48	46	42	50	82	1690	2460	1850	385	381	84
29	55	46	44	50	55	74	2000	2730	1640	483	341	88
30	58	44	44	48	---	68	2040	2860	1580	429	329	77
31	48	---	42	46	---	78	---	2990	---	416	317	---
TOTAL	1505	1480	1434	1388	1359	2117	23387	68530	86090	22158	11070	5855
MEAN	48.5	49.3	46.3	44.8	46.9	68.3	780	2211	2870	715	357	195
MAX	88	60	50	50	55	86	2040	3790	4190	1780	466	560
MIN	39	42	42	42	42	55	57	1360	1580	385	298	77
AC-FT	2990	2940	2840	2750	2700	4200	46380	135900	170800	43950	21960	11610

CAL YR 1979 TOTAL 216227 MEAN 592 MAX 4170 MIN 39 AC-FT 428900
WTR YR 1980 TOTAL 226293 MEAN 618 MAX 4190 MIN 39 AC-FT 448900

09168100 DISAPPOINTMENT CREEK NEAR DOVE CREEK, CO

LOCATION.--Lat 37°52'36", long 108°34'57", Dolores County, Hydrologic Unit 14030002, 0.2 mi (0.3 km) downstream from ford, 6.5 mi (10.5 km) southeast of Cedar, and 19 mi (31 km) northeast of town of Dove Creek.

DRAINAGE AREA.--147 mi² (381 km²).

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,420 ft (1,957 m), from topographic map.

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are poor. Several small reservoirs and ponds above station. Small diversions for irrigation above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--23 years, 17.6 ft³/s (0.498 m³/s), 12,750 acre-ft/yr (15.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,270 ft³/s (206 m³/s) July 24, 1977, gage height, 13.38 ft (4.078 m), from rating curve extended above 250 ft³/s (7.1 m³/s), on basis of slope-area measurements at gage heights 7.18, 10.26, and 13.38 ft (2.188, 3.127, and 4.078 m); maximum gage height, 13.54 ft (4.127 m) July 13, 1965 (slope-area measurement); no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,400 ft³/s (39.6 m³/s) at 1630 Sept. 6, gage height, 8.36 ft (2.548 m), only peak above base of 560 ft³/s (16 m³/s); minimum daily, 0.08 ft³/s (0.002 m³/s) Oct. 3, 4, Aug. 9-13, 19-23, Sept. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	.65	1.2	.80	2.4	9.0	7.2	155	100	20	.95	.25
2	.15	.65	1.6	1.4	2.6	9.0	7.5	117	103	21	.95	.25
3	.08	.80	2.0	.30	2.8	9.0	14	120	107	18	.95	.15
4	.08	.65	1.4	1.0	2.8	10	13	136	115	16	.95	.08
5	.15	.55	1.6	.30	3.2	11	22	155	120	13	.80	.08
6	.25	.45	1.6	.60	3.0	10	38	155	124	10	.55	82
7	.35	.55	1.5	.80	2.8	9.5	35	250	115	8.2	.25	13
8	.35	.95	1.4	1.4	3.0	9.5	26	230	103	7.2	.15	9.0
9	.35	1.1	1.3	3.0	2.6	9.0	34	182	110	6.0	.08	3.0
10	.35	.80	1.6	4.8	2.4	8.5	61	145	115	5.5	.08	20
11	.35	.45	1.8	5.0	2.6	9.0	44	223	111	4.6	.08	9.0
12	.35	.25	1.0	3.4	2.9	9.5	29	196	96	4.3	.08	2.0
13	.35	.25	.50	5.0	2.9	9.0	32	142	89	4.6	.08	1.6
14	.45	.35	.80	8.0	17	8.5	46	128	84	5.2	.25	1.2
15	.45	.55	.90	11	29	8.5	75	180	74	4.9	.65	1.0
16	.45	.65	.80	6.5	21	8.0	89	165	69	4.1	.55	1.0
17	.45	.80	.80	4.6	14	8.0	107	156	64	4.1	.45	1.0
18	.45	1.4	.60	4.0	64	8.5	141	115	58	3.8	.25	1.0
19	.55	1.4	.60	6.0	41	9.0	164	118	54	3.3	.08	1.0
20	1.1	1.6	.60	4.8	40	8.0	199	131	50	3.1	.08	1.0
21	10	1.1	1.2	3.6	17	7.5	246	155	42	2.9	.08	1.0
22	2.1	1.2	1.4	3.2	18	7.5	250	169	37	2.4	.08	1.0
23	1.1	1.1	1.2	2.4	11	7.5	207	182	35	1.9	.08	.95
24	.80	1.2	2.0	1.8	11	7.5	162	159	33	1.9	1.0	.95
25	.65	1.4	1.6	2.2	10	7.2	134	114	34	2.1	1.9	.95
26	.65	1.4	2.2	2.2	10	8.0	145	90	30	2.6	1.1	.95
27	.65	1.4	2.4	2.2	11	9.0	134	92	28	1.9	.80	.95
28	.65	1.2	2.2	2.2	10	11	155	98	26	1.4	.55	.80
29	.80	1.2	1.2	3.6	10	7.9	172	107	23	.80	.45	.80
30	1.2	1.3	1.0	3.4	---	6.9	212	110	21	.80	.35	.65
31	.80	---	.80	3.6	---	7.9	---	111	---	.95	.25	---
TOTAL	26.61	27.35	40.80	103.30	370.0	270.0	3000.7	4584	2170	186.55	14.90	156.61
MEAN	.86	.91	1.32	3.33	12.8	8.71	100	148	72.3	6.02	.48	5.22
MAX	10	1.6	2.4	11	64	11	250	250	124	21	1.9	82
MIN	.08	.25	.50	.30	2.4	6.9	7.2	90	21	.80	.08	.08
AC-FT	53	54	81	205	734	536	5950	9090	4300	370	30	311

CAL YR 1979 TOTAL 12367.20 MEAN 33.9 MAX 258 MIN .00 AC-FT 24530
WTR YR 1980 TOTAL 10950.82 MEAN 29.9 MAX 250 MIN .08 AC-FT 21720

NOTE.--NO GAGE-HEIGHT RECORD NOV. 22 TO FEB. 11, FEB. 23 TO MAR. 24.

BEST DOCUMENT AVAILABLE

09169500 DOLORES RIVER AT BEDROCK, CO

LOCATION.--Lat 38°18'37", long 108°53'05", in NW¼SW¼ sec.20, T.47 N., R.18 W., Montrose County, Hydrologic Unit 14030002, on right bank at upstream side of bridge, 0.4 mi (0.6 km) southeast of Bedrock, and 3.1 mi (5.0 km) upstream from East Paradox Creek.

DRAINAGE AREA.--2,024 mi² (5,242 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1917 to September 1922 (monthly discharge only for some periods, published in WSP 1313), August 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,940 ft (1,506 m), from topographic map. Prior to Aug. 1, 1971, nonrecording gage at different datum.

REMARKS.--Records good. Diversions above station for irrigation of about 5,000 acres (20 km²) above station and about 33,000 acres (130 km²) in the San Juan River basin.

AVERAGE DISCHARGE.--14 years (water years 1918-22, 1972-80), 493 ft³/s (13.96 m³/s), 357,200 acre-ft/yr (440 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,280 ft³/s (263 m³/s) Apr. 30, 1973, gage height, 12.09 ft (3.685 m), from floodmarks, from rating curve extended above 8,700 ft³/s (250 m³/s); no flow Sept. 13, 1974, Aug. 15 to 18, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 7.15 ft (2.179 m), present datum, from floodmarks (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,700 ft³/s (246 m³/s) at 1730 Apr. 22, gage height, 11.93 ft (3.636 m); minimum daily, 4.7 ft³/s (0.133 m³/s) Oct. 2-10, Sept. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	8.2	6.0	46	61	69	52	5730	3080	1040	11	5.4
2	4.7	8.2	6.8	44	44	77	58	3740	3030	1020	11	5.4
3	4.7	8.2	8.9	42	44	80	65	3210	2820	1310	10	5.4
4	4.7	8.2	8.0	40	44	56	69	3350	2990	925	9.7	5.4
5	4.7	8.2	8.0	42	43	59	61	3550	3330	750	9.3	5.0
6	4.7	8.2	13	38	46	61	59	3840	3580	624	8.9	4.7
7	4.7	8.5	33	48	53	59	65	4240	3740	536	8.9	59
8	4.7	9.3	48	46	58	52	207	5410	3440	484	8.2	8.5
9	4.7	9.3	46	50	59	52	218	5470	3280	446	7.8	6.8
10	4.7	8.5	44	55	54	44	220	4040	3710	428	7.4	17
11	5.0	8.2	42	60	47	39	388	3140	4270	355	7.4	13
12	5.4	8.2	37	70	47	43	588	4450	4350	298	7.1	15
13	5.4	11	38	75	47	38	442	3480	3970	223	7.4	29
14	5.4	13	38	85	47	39	424	2560	3640	174	15	25
15	5.7	9.7	38	90	61	39	692	2410	3290	159	8.5	64
16	6.0	8.5	40	88	97	36	1420	2840	2880	159	18	31
17	6.0	8.5	39	93	134	28	2170	2720	2620	132	19	19
18	5.7	8.9	39	108	138	33	2830	2850	2520	77	12	14
19	6.0	10	33	116	151	40	3830	2730	2730	46	9.7	11
20	6.0	11	32	112	107	43	4990	3010	2680	33	8.5	9.3
21	9.3	10	40	89	100	39	6400	3560	2450	27	7.8	8.5
22	8.2	8.5	40	72	145	43	7750	4250	2190	22	7.4	7.4
23	7.8	8.2	40	52	104	52	7880	4950	2100	21	7.1	7.4
24	7.8	10	39	52	82	72	7300	5240	1980	19	7.4	7.1
25	7.8	9.3	44	47	84	99	4950	4420	1910	18	88	6.8
26	7.8	8.9	90	54	80	80	5330	3090	1740	52	142	6.4
27	7.8	8.9	38	56	79	75	5650	2720	1710	18	9.7	6.4
28	7.4	5.4	37	53	53	77	4780	2630	1610	15	7.4	6.4
29	7.4	5.4	34	53	73	61	5400	2680	1360	14	6.0	6.0
30	7.8	6.0	36	64	---	65	5920	2860	1130	13	5.7	6.0
31	8.2	---	50	65	---	61	---	2960	---	12	5.4	---
TOTAL	191.2	262.4	1045.7	2005	2342	1711	60208	112130	84130	9450	498.7	421.3
MEAN	6.17	8.75	33.7	64.7	80.8	55.2	2674	3617	2804	305	16.1	14.0
MAX	9.3	13	90	116	187	99	7880	5730	4350	1310	142	64
MIN	4.7	5.4	6.0	38	43	28	52	2410	1130	12	5.4	4.7
AC-FT	379	520	2070	3980	4650	3390	159100	222400	166900	18740	989	836

CAL YR 1979 TOTAL 294923.6 MEAN 808 MAX 7440 MIN 4.2 AC-FT 585000
WTR YR 1980 TOTAL 294395.3 MEAN 804 MAX 7880 MIN 4.7 AC-FT 583900

BEST DOCUMENT AVAILABLE

09169500 DOLORES RIVER AT BEDROCK, CO--Continued
(Water-Quality Monitor)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1979 to current year.
WATER TEMPERATURES: November 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1979.

REMARKS.--Daily maximum and minimum specific-conductance and water-temperatures data available in district office.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 4,260 micromhos Sept. 7; minimum, 268 micromhos May 8.
WATER TEMPERATURES: Maximum, 31.5°C Aug. 10; minimum, 0.0°C many days during December to March.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT				
02...	0810	4.9	1100	9.0
30...	0750	7.7	800	3.0
NOV				
26...	1500	--	1310	3.0
DEC				
04...	0830	8.4	1430	.5
19...	1300	29	1810	2.0
JAN				
08...	0700	E46	1300	.0
21...	1300	--	1350	3.0
FEB				
08...	1200	--	1560	5.5
12...	0700	47	1060	.0
26...	0900	--	1600	3.5
MAR				
13...	0600	--	1610	6.5
25...	1000	101	1960	6.0
APR				
09...	0930	--	1700	8.0
21...	1200	--	320	8.5
APR				
23...	1435	8400	290	8.0
29...	1445	6670	290	9.0
MAY				
12...	1000	--	297	8.0
21...	1535	3150	285	13.0
JUN				
03...	0955	2730	220	13.0
17...	0700	2620	197	15.0
JUL				
02...	1400	--	260	20.5
08...	0910	488	400	19.5
22...	0900	--	1580	22.5
AUG				
05...	0810	9.1	1800	21.0
19...	0800	--	2800	17.0
SEP				
03...	0815	5.2	1150	16.0
16...	0900	--	1130	15.5

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	1490	1310	1410	2100	1560	273	200	230	1500	1390
2		---	1560	1290	1350	2070	1590	298	200	250	1500	1350
3		---	1560	1320	1340	1770	1600	311	215	300	1600	1340
4		---	1510	1330	1350	1740	1600	302	200	340	1750	1450
5		---	1510	1360	1370	1880	1640	293	200	355	1900	1270
6		---	1200	1430	1450	1740	1710	279	210	375	1930	1260
7		---	1110	1370	1500	1750	1640	278	205	390	1940	2810
8		---	1020	1300	1540	1770	1630	281	205	400	1940	1770
9		---	1350	1310	1490	1600	1690	270	210	420	1980	1600
10		---	1430	1300	1420	1620	1470	275	210	440	2070	1520
11		---	1480	1370	1320	1560	1150	300	220	460	2140	1990
12		---	1560	1370	1280	1590	924	298	220	470	2150	2540
13		---	1540	1280	1380	1590	657	315	215	480	2150	1960
14		---	1540	1240	1410	1600	533	348	210	500	1900	1760
15		---	1540	1150	1450	1610	425	370	200	520	1640	1690
16		---	1520	1190	1560	1650	400	373	200	540	1240	1150
17		---	1600	1170	1770	1630	380	397	200	540	2540	1190
18		---	1500	1140	1520	1660	360	370	210	560	2980	1420
19		---	1500	1100	1520	1760	340	344	230	600	2830	1800
20		---	1460	1070	1850	1750	320	318	245	640	2870	2140
21		---	1410	1270	1730	1800	300	280	260	660	2670	2080
22		---	1370	1220	1700	1770	290	210	275	690	2470	1960
23		---	1320	1240	2310	1850	270	150	280	710	2310	1920
24		---	1360	1200	2010	1900	270	185	265	760	2120	1820
25		---	1340	1210	1830	1870	260	155	290	800	2050	1730
26		1190	1360	1320	1900	1650	260	170	275	580	904	1630
27		1180	1270	1360	1910	1620	250	180	280	730	1150	1500
28		1190	1220	1300	2050	1630	250	185	250	850	1270	1360
29		1200	1290	1310	2180	1610	260	200	235	980	1370	1270
30		1230	1300	1290	---	1530	262	195	220	1130	1410	1220
31		---	1330	1360	---	1520	---	215	---	1300	1420	---

E ESTIMATED.

09169500 DOLORES RIVER AT BEDROCK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	---	1.5	.0	.0	3.5	.0	13.5	2.5
2			---	---	---	1.0	.0	.0	---	.0	13.5	2.0
3			---	---	---	.5	---	.0	---	.0	9.5	2.0
4			---	---	---	.5	.0	.0	---	1.0	9.5	.5
5			---	---	---	.0	.0	.0	---	.0	11.5	.0
6			---	---	---	.0	2.0	.0	4.5	.0	9.0	1.0
7			---	---	---	.0	.5	.0	4.5	.0	10.5	---
8			---	---	---	.0	.0	.0	5.5	.0	11.0	---
9			---	---	---	.0	.5	.0	6.0	.0	8.0	3.5
10			---	---	---	.0	.0	.0	5.5	.0	8.0	---
11			---	---	---	.0	2.0	.0	5.5	.0	7.5	---
12			---	---	---	.0	3.0	.0	7.0	.0	8.0	---
13			---	---	---	.0	---	.0	8.0	.0	7.0	3.5
14			---	---	---	.0	---	.0	8.0	2.5	6.5	---
15			---	---	---	.0	---	.0	9.0	3.5	7.0	---
16			---	---	---	.0	---	.0	---	---	8.5	---
17			---	---	2.0	.0	---	.0	---	---	6.0	---
18			---	---	1.0	.0	---	.0	8.5	---	5.5	---
19			---	---	2.0	.0	---	.0	8.5	---	7.0	---
20			---	---	1.0	.0	---	.0	---	---	6.0	---
21			---	---	.0	.0	---	.0	---	---	7.5	---
22			---	---	---	.0	---	.0	10.0	---	5.5	---
23			---	---	---	.0	---	.0	10.0	---	7.5	---
24			---	---	.0	.0	---	.0	---	4.0	8.5	---
25			---	---	.0	.0	---	.0	---	3.5	16.5	---
26			4.0	3.0	.0	.0	3.0	.0	---	3.5	13.0	1.5
27			---	2.0	---	.0	2.0	.5	---	3.0	13.0	2.0
28			---	1.5	---	.0	2.0	.0	---	3.0	13.5	3.0
29			---	2.0	---	.0	---	.0	---	3.5	12.0	.0
30			---	1.5	.0	.0	---	.0	---	---	10.5	.5
31			---	---	---	.0	2.5	.0	---	---	10.5	---

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.0	---	8.0	---			---		---	---	26.5	15.0
2	10.5	---	10.0	---			---		---	---	26.0	15.5
3	10.0	---	10.5	---			---		---	---	26.0	15.5
4	10.0	---	10.5	---			---		---	---	27.5	15.0
5	9.5	---	11.0	---			---		29.0	21.0	24.5	15.5
6	11.0	5.5	11.0	9.5			---		28.5	20.0	23.0	16.5
7	10.5	4.5	11.0	10.0			---		29.0	20.0	24.0	17.5
8	9.0	---	10.5	9.0			---		30.5	20.0	22.5	18.5
9	9.5	---	10.5	---			---		31.0	20.5	20.5	17.5
10	8.5	---	10.5	---			---		31.5	20.0	20.0	17.0
11	4.0	---	9.5	---			---		31.0	19.5	20.0	15.5
12	4.5	---	11.0	---			---		29.0	19.5	22.5	16.0
13	6.5	---	8.0	6.5			---		27.5	19.5	20.5	15.5
14	8.5	---	10.5	7.5			22.5		26.0	21.0	19.0	14.5
15	---	---	12.0	---			---		25.5	19.5	19.0	14.0
16	---	---	12.5	---			---		23.5	17.5	20.5	15.0
17	---	---	12.0	---			---		24.5	18.0	19.5	14.0
18	---	---	14.0	.5			---		24.0	18.0	19.0	13.0
19	---	---	14.5	10.5			---		21.0	16.5	19.5	13.5
20	---	---	15.0	11.0			---		26.0	15.0	19.0	12.5
21	---	---	13.0	12.0			---		27.5	15.5	18.0	11.5
22	---	---	---	---			---		26.0	17.0	18.0	10.5
23	---	---	---	---			---		23.5	19.0	18.0	9.0
24	---	---	---	---			---		24.0	19.0	17.5	9.0
25	---	---	---	---			---		23.0	16.0	17.5	8.5
26	---	---	---	---			---		20.0	12.0	17.5	10.5
27	---	---	---	---			---		24.0	15.5	19.0	9.0
28	---	---	---	---			---		24.5	15.5	18.5	10.5
29	8.5	8.0	---	---			---		24.0	16.0	19.0	10.0
30	10.0	---	---	---			---		24.0	15.5	18.0	8.0
31	---	---	---	---			---		24.5	14.5	---	---

BEST DOCUMENT AVAILABLE

09171100 DOLORES RIVER NEAR BEDROCK, CO

LOCATION.--Lat 38°21'29", long 108°49'54", in SW¼NW¼ sec.2, T.47 N., R.18 W., Montrose County, Hydrologic Unit 14030002, on right bank 2.5 mi (4.0 km) downstream from West Paradox Creek and 4.3 mi (6.9 km) northeast of Bedrock.

DRAINAGE AREA.--2,145 mi² (5,556 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,910 ft (1,497 m), from topographic map. Prior to Feb. 1, 1972, at site 400 ft (120 m) upstream at datum 1.02 ft (0.311 m) higher.

REMARKS.--Records good. Diversions above station for irrigation of about 41,000 acres (170 km²), of which about 33,000 acres (130 km²) is in the San Juan River basin.

AVERAGE DISCHARGE.--9 years, 492 ft³/s (13.93 m³/s), 356,500 acre-ft/yr (440 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,500 ft³/s (269 m³/s) Apr. 30, 1973, gage height, 12.88 ft (3.926 m), from floodmarks; minimum daily, 0.12 ft³/s (0.003 m³/s) July 17, 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 11.25 ft (3.429 m), site and datum in use prior to Feb. 1, 1972 (discharge, 5,710 ft³/s or 162 m³/s), by slope-area measurement at site 1,400 ft (430 m) upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,460 ft³/s (240 m³/s Apr. 22, gage height, 12.45 ft (3.795 m); minimum daily, 5.9 ft³/s (0.167 m³/s) Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	12	18	52	74	80	71	5890	3080	1040	18	7.7
2	6.1	12	17	49	68	79	72	3930	3080	1030	17	7.7
3	6.1	12	16	48	62	90	77	3270	2800	1340	17	7.7
4	5.9	12	15	44	62	70	80	3380	2990	940	16	7.7
5	6.1	12	14	51	62	70	76	3600	3330	760	16	7.7
6	6.1	12	19	43	59	71	79	3890	3640	640	15	7.7
7	6.1	13	32	59	65	70	82	4240	3810	550	14	57
8	6.1	13	52	51	71	60	200	5510	3510	500	14	19
9	6.1	13	49	56	74	60	278	5610	3320	424	13	12
10	6.3	13	49	62	68	55	278	4130	3770	436	12	24
11	6.3	13	55	71	64	48	442	3240	4130	348	12	26
12	6.5	12	41	79	62	50	770	4420	4180	268	11	20
13	7.1	13	40	85	65	48	575	3600	3830	195	11	39
14	7.7	17	44	95	65	48	525	2600	3640	163	23	33
15	8.0	16	45	107	79	48	757	2480	3270	145	13	73
16	7.7	14	46	97	98	46	1670	2790	2890	139	13	56
17	8.0	14	52	104	139	38	2490	2680	2610	137	35	38
18	8.0	15	48	125	151	40	3210	2760	2530	92	21	27
19	8.3	16	48	133	163	48	4200	2850	2760	65	15	21
20	8.6	17	46	133	192	50	5230	3120	2790	53	12	16
21	10	16	46	112	195	48	6220	3620	2520	43	12	13
22	10	15	64	87	165	50	7150	4250	2240	33	11	12
23	10	14	52	70	121	60	7460	4820	2080	29	10	11
24	10	15	43	68	97	80	7040	4920	2000	26	11	10
25	11	16	51	65	97	116	5500	4530	1970	25	13	10
26	11	16	62	66	85	97	5700	3370	1790	45	215	9.5
27	11	16	59	65	93	87	5950	2840	1750	30	23	9.5
28	11	18	43	72	66	88	5080	2680	1690	23	13	9.5
29	11	19	35	70	82	82	5520	2730	1460	21	11	9.0
30	11	19	39	80	---	79	5960	2930	1240	19	9.2	9.0
31	11	---	58	76	---	79	---	2950	---	19	8.0	---
TOTAL	254.4	435	1298	2375	2744	2035	82742	113630	84700	9578	654.2	609.7
MEAN	8.21	14.5	41.9	76.6	94.6	65.6	2758	3665	2823	309	21.1	20.3
MAX	11	19	64	133	195	116	7460	5890	4180	1340	215	73
MIN	5.9	12	14	43	59	38	71	2480	1240	19	8.0	7.7
AC-FT	505	863	2570	4710	5440	4040	164100	225400	168000	19000	1300	1210

CAL YR 1979 TOTAL 307213.1 MEAN 842 MAX 7390 MIN 5.9 AC-FT 609400
WTR YR 1980 TOTAL 301055.3 MEAN 823 MAX 7460 MIN 5.9 AC-FT 597100

09171100 DOLORES RIVER NEAR BEDROCK, CO--Continued
(Water-Quality Monitor)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1979 to current year.
WATER TEMPERATURES: December 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since December 1979.

REMARKS.--Daily maximum and minimum specific-conductance and water-temperature data available in district office.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 37,300 micromhos Dec. 4; minimum, 116 micromhos May 22.
WATER TEMPERATURES: Maximum, 32.0°C July 21; minimum, 0.0°C on many days during winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT				
02...	0930	6.4	60000	13.0
DEC				
04...	1230	14	44000	.5
19...	1345	76	20000	.0
JAN				
08...	1000	53	11800	.0
21...	1430	--	6230	3.0
24...	1300	--	12900	2.0
FEB				
08...	1300	--	7700	6.5
12...	0800	68	7900	.0
26...	1000	--	7610	4.5
MAR				
13...	1300	117	6080	9.5
25...	1440	117	3200	8.0
APR				
09...	0900	--	1910	8.0
23...	1130	7070	340	6.0
APR				
29...	1215	5340	290	8.0
MAY				
12...	1000	--	307	8.0
21...	1140	3460	310	14.0
JUN				
03...	1135	2740	300	13.0
17...	1300	2550	320	15.0
JUL				
02...	1400	--	300	20.5
08...	1320	468	1200	23.0
22...	0830	--	6800	20.0
AUG				
05...	1030	16	13400	20.0
19...	1200	--	10800	21.0
SEP				
03...	1015	7.6	16000	15.0
16...	0800	--	2800	14.0

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---	9980	8980	5300	3760	358	200	276	12600	15400
2			---	10200	9180	5790	3810	348	200	336	12800	15500
3			---	10900	9400	4290	3410	308	227	370	13600	16000
4			---	11100	9320	5330	3310	217	204	434	14300	15900
5			32700	11300	9260	5270	3600	217	200	498	14800	15500
6			29000	11500	9710	4820	3950	220	210	523	15500	16000
7			23300	10900	8800	4900	3830	231	202	563	15600	5400
8			21300	10700	7970	5200	2400	248	204	613	15900	7000
9			20000	9710	7730	4950	2000	245	213	898	16700	8440
10			19200	9670	8760	5110	2000	260	213	1100	17100	6180
11			17700	8710	9820	5720	1650	282	221	1420	17400	4900
12			18500	8350	9370	4970	1120	298	223	1870	18300	5550
13			16400	8050	8900	5300	1040	285	218	2270	19200	4210
14			17000	7850	9410	5900	890	345	224	2600	13600	4030
15			16100	7700	8010	5870	830	362	230	3220	13800	2800
16			14800	7850	6500	5900	730	254	236	3920	14800	3000
17			14500	7750	4710	6470	650	357	237	4220	7100	3340
18			13700	6800	4530	6700	470	328	247	4720	8770	4250
19			12500	6400	4210	5370	390	268	249	5020	11500	5330
20			13200	6400	3990	4480	370	273	251	5330	14100	6400
21			12300	7410	3810	4830	356	275	269	5580	16300	7600
22			12000	9010	4460	4610	349	219	294	7310	18200	8220
23			11600	10800	6160	3980	341	154	301	8060	19000	8900
24			11200	12500	7070	3640	333	186	282	8860	19300	9310
25			11100	11800	6770	3120	326	152	314	8900	20000	9910
26			10700	10900	7000	3320	318	164	302	7110	2200	10500
27			11700	10700	5510	3480	311	182	309	8130	4700	11100
28			12700	9780	7320	3310	303	189	271	10300	9210	11400
29			12700	10000	5660	3350	321	200	251	10900	12400	11600
30			11900	8660	---	3540	343	198	230	11500	14200	11800
31			9880	9200	---	3400	---	216	---	12100	15000	---

09171100 DOLORES RIVER NEAR BEDROCK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1					---	---	2.0	.0	8.0	.0	10.5	2.5
2					---	---	2.5	.0	8.5	1.0	9.0	3.5
3					---	---	3.0	.0	8.0	---	6.5	3.0
4					---	.0	2.0	.0	9.0	2.5	8.0	3.5
5					---	.0	2.5	.0	8.5	1.5	8.5	2.5
6					---	.0	2.5	.0	6.5	2.5	7.0	4.0
7					1.5	.0	1.5	.0	7.5	3.5	6.0	3.5
8					.0	.0	1.5	.0	8.0	2.5	11.0	4.0
9					.5	.0	---	.0	6.5	.5	10.5	2.5
10					1.5	.0	---	.0	7.0	1.0	12.0	2.5
11					.5	.0	---	.0	7.0	---	6.5	4.5
12					1.0	.0	---	.0	7.0	---	11.0	4.0
13					.0	.0	---	---	8.0	1.0	11.5	2.5
14					.0	.0	---	---	5.0	3.5	12.0	2.5
15					.0	.0	---	---	7.0	3.5	10.0	3.5
16					.0	.0	---	---	8.5	3.5	8.0	3.5
17					.0	.0	---	---	6.5	3.5	12.0	---
18					.5	.0	---	---	7.0	4.0	13.0	---
19					1.0	.0	---	---	7.5	3.5	14.0	5.0
20					1.5	.0	---	---	5.0	3.5	14.5	---
21					1.5	.0	---	---	5.0	3.0	13.0	5.0
22					3.0	.0	---	---	7.5	3.0	9.5	6.5
23					2.5	.0	---	---	9.0	4.0	11.5	6.0
24					1.5	.0	4.0	.0	10.0	3.0	11.0	5.0
25					1.5	.0	5.5	.0	9.5	3.0	---	---
26					1.0	.0	5.5	.0	9.5	3.5	13.0	---
27					1.5	.0	3.5	.0	10.0	1.5	13.5	4.5
28					3.0	.0	3.0	.0	9.5	2.5	11.5	6.0
29					3.0	.0	4.0	.0	9.5	3.0	12.0	5.0
30					2.5	.0	6.5	.0	---	---	9.5	---
31					1.5	.0	7.0	.0	---	---	11.0	---

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	12.5	3.0	7.5	7.5	14.0	12.0	---	16.0	30.0	22.0	28.5	14.5
2	9.5	---	7.5	7.0	13.5	12.0	22.5	14.5	32.5	21.5	28.0	15.0
3	15.0	5.5	9.0	7.0	15.0	12.0	22.5	18.5	30.0	22.0	26.5	15.0
4	16.5	---	10.5	8.0	16.0	13.0	22.5	18.5	30.0	15.5	26.5	13.0
5	17.0	8.5	---	9.5	15.5	13.5	23.5	18.5	28.5	19.5	25.5	14.0
6	17.5	9.0	---	9.0	14.5	13.0	23.5	19.0	29.5	18.0	27.0	15.0
7	16.0	8.5	---	9.0	14.0	13.0	23.0	20.5	30.5	18.5	25.0	15.5
8	14.0	---	---	8.0	14.5	13.0	24.0	20.0	30.0	19.0	23.5	16.5
9	14.0	8.0	---	8.0	16.5	13.0	26.5	20.0	30.5	19.5	21.5	16.0
10	15.0	---	---	8.0	16.0	14.5	24.5	20.5	30.0	19.0	19.5	15.5
11	9.5	4.0	---	8.0	15.5	15.0	27.5	20.5	30.0	17.0	22.0	13.5
12	8.5	---	---	7.0	15.0	14.5	28.0	21.0	29.5	17.5	23.5	15.0
13	9.5	---	---	6.0	15.0	14.5	26.0	21.0	29.5	18.0	24.0	14.0
14	12.5	---	---	7.0	14.5	14.5	28.0	19.0	27.0	19.5	22.0	---
15	14.0	---	10.5	7.5	15.0	14.0	27.5	18.5	27.0	19.0	23.0	---
16	12.0	---	11.0	8.5	16.5	14.0	30.0	18.5	27.5	16.0	24.0	14.5
17	---	---	11.0	9.0	17.5	14.5	30.5	19.0	27.5	16.0	24.5	13.0
18	---	---	13.5	10.5	17.5	15.0	29.5	19.5	25.5	15.0	23.5	12.5
19	---	---	13.5	12.0	19.0	16.0	29.0	19.0	23.5	16.0	23.5	14.0
20	---	---	13.5	12.5	19.0	---	31.0	18.0	26.0	13.0	24.0	---
21	---	---	14.0	13.5	19.5	---	---	18.5	27.0	13.0	21.5	12.0
22	---	---	15.0	14.0	19.5	15.5	29.5	19.5	26.0	14.0	23.0	---
23	---	---	14.5	13.0	19.0	16.5	29.0	19.0	24.5	18.0	22.5	11.0
24	---	---	13.0	12.0	---	15.0	30.0	19.5	24.0	17.5	23.0	10.5
25	---	---	12.0	9.5	---	16.5	29.5	19.5	26.0	16.5	23.5	11.0
26	---	---	10.0	9.5	---	17.0	29.5	19.0	23.5	14.5	22.5	---
27	---	---	11.0	10.0	---	16.0	30.5	19.0	25.0	14.5	25.0	---
28	---	---	13.0	10.5	---	13.5	31.0	14.5	25.0	14.5	25.5	13.0
29	17.0	---	15.0	11.5	---	9.5	28.5	19.5	25.0	15.5	24.5	13.0
30	---	7.5	15.5	12.0	---	17.5	31.5	20.0	25.5	15.0	25.5	12.5
31	---	---	15.0	12.0	---	---	31.0	20.5	25.0	14.0	---	---

BEST DOCUMENT AVAILABLE

09172500 SAN MIGUEL RIVER NEAR PLACERVILLE, CO

LOCATION.--Lat 38°02'05", long 108°07'15", in NW¼SW¼ sec.30, T.44 N., R.11 W., San Miguel County, Hydrologic Unit 14030003, on right bank 0.7 mi (1.1 km) downstream from Specie Creek and 4.0 mi (6.4 km) northwest of Placerville.

DRAINAGE AREA.--308 mi² (798 km²).

PERIOD OF RECORD.--January to December 1909, September 1910 to December 1912, April 1930 to September 1934, April 1942 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Placerville," 1910-12.

GAGE.--Water-stage recorder. Datum of gage is 7,055.80 ft (2,150.608 m) (Water and Power Resources Service bench mark). See WSP 1713 or 1733 for history of changes prior to Oct. 21, 1958.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 1,700 acres (6.88 km²) above station. One diversion from Fall Creek for irrigation of about 2,000 acres (8.09 km²) in Beaver and Saltado Creek basins. One small ditch diverts water from Leopard Creek to Uncompahgre River basin. Slight regulation by Lake Hope and Trout Lake of Western Colorado Co., combined capacity, 5,040 acre-ft (6.21 hm³). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--44 years (water years 1911-12, 1931-34, 1943-80), 225 ft³/s (6.372 m³/s), 163,000 acre-ft/yr (201 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft³/s (283 m³/s) Sept. 5, 1909 (result of failure of Trout and Middle Reservoir Dams); minimum daily, 26 ft³/s (0.74 m³/s) Jan. 5, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,930 ft³/s (54.7 m³/s) at 0400 June 11, gage height, 5.17 ft (1.576 m), only peak above base of 900 ft³/s (25 m³/s); minimum daily, 40 ft³/s (1.13 m³/s) Mar. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	65	60	50	65	50	44	490	762	880	244	167
2	69	78	65	50	75	50	50	420	753	860	238	198
3	69	69	70	50	75	50	49	463	790	780	230	190
4	68	64	65	50	67	48	47	494	840	700	234	145
5	68	64	65	50	65	47	50	520	910	674	230	145
6	67	65	65	55	63	45	53	510	940	626	220	142
7	67	68	65	65	61	47	54	682	1010	996	216	140
8	65	68	65	75	82	44	59	634	1050	700	282	190
9	72	69	67	85	83	47	55	547	1160	650	230	164
10	73	67	67	95	92	47	56	480	1300	618	206	192
11	74	60	67	85	90	46	58	547	1540	561	180	216
12	74	58	60	80	90	45	53	480	1500	582	185	150
13	73	62	50	75	89	41	56	430	1490	561	192	135
14	74	62	48	70	78	44	57	390	1410	522	206	116
15	64	63	48	72	82	44	73	380	1110	465	252	108
16	64	62	48	65	83	44	74	344	1090	435	216	101
17	72	67	46	60	78	40	83	366	1010	405	192	97
18	69	65	48	58	84	43	103	331	1200	395	179	90
19	68	64	48	63	78	45	152	344	1310	390	179	88
20	69	64	55	60	80	45	216	380	1020	364	152	84
21	82	64	60	55	80	47	271	470	950	340	120	82
22	69	65	60	55	78	48	371	642	990	323	161	78
23	70	76	70	55	60	48	445	780	950	299	164	70
24	78	84	65	50	54	47	350	762	1040	299	216	77
25	76	78	60	65	49	50	287	610	990	299	291	74
26	77	69	75	85	52	47	331	547	1010	319	238	74
27	77	73	80	95	56	50	366	522	1040	279	213	83
28	67	65	65	90	58	48	448	554	960	241	196	108
29	69	55	60	75	56	48	498	626	780	238	185	108
30	69	60	55	68	---	46	528	666	790	295	179	89
31	72	---	55	60	---	48	---	744	---	252	170	---
TOTAL	2193	1993	1877	2066	2103	1439	5336	16171	31715	14934	6332	3597
MEAN	70.7	66.4	60.5	66.6	72.5	46.4	178	522	1057	482	204	120
MAX	82	84	80	95	92	50	528	780	1540	880	291	216
MIN	64	55	46	50	49	40	44	331	753	238	120	74
AC-FT	4350	3950	3720	4100	4170	2850	10580	32080	62910	29620	12560	7130

CAL YR 1979 TOTAL 104896 MEAN 287 MAX 1920 MIN 46 AC-FT 208100
WTR YR 1980 TOTAL 89756 MEAN 245 MAX 1540 MIN 40 AC-FT 178000

BEST DOCUMENT AVAILABLE

09172600 SALTADO CREEK NEAR NORWOOD, CO

LOCATION.--Lat 37°55'25", long 108°07'51", in NE¼NE¼ sec.12, T.42 N., R.12 W., San Miguel County, Hydrologic Unit 14030003, on right bank 150 ft (46 m) upstream from point of return flow from McCulloch Creek ditch and 18 mi (29 m) southeast of Norwood.

DRAINAGE AREA.--4.53 mi^2 (11.73 km^2).

PERIOD OF RECORD.--April 1976 to July 1980 (seasonal records only), (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 9,270 ft (2,825 m), from topographic map.

REMARKS.--Records good. Seasonal station operated only for runoff period April to July. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 62 ft^3/s (1.76 m^3/s) May 18, 1979, gage height, 3.23 ft (0.984 m); minimum daily, 0.02 ft^3/s (0.001 m^3/s) July 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 47 ft^3/s (1.33 m^3/s) at 1830 May 20, gage height, 2.85 ft (0.869 m); minimum daily, 0.42 ft^3/s (0.012 m^3/s) Apr. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							.48	7.5	18	4.9		
2							.44	7.0	17	4.6		
3							.42	7.0	17	3.9		
4							.44	8.0	17	3.6		
5							.46	9.0	18	3.2		
6							.48	11	18	2.9		
7							.48	14	16	2.9		
8							.50	17	15	2.9		
9							.60	14	15	2.5		
10							.80	13	15	2.3		
11							1.0	12	15	2.1		
12							1.1	11	14	2.0		
13							1.3	10	14	2.3		
14							2.0	9.5	12	2.2		
15							2.4	9.5	11	1.7		
16							3.0	10	9.8	1.5		
17							3.8	13	9.0	1.4		
18							4.6	18	8.8	1.3		
19							6.0	24	8.8	1.0		
20							7.5	28	8.5	.99		
21							8.5	28	8.1	.99		
22							9.5	28	7.4	.93		
23							9.5	26	6.9	1.4		
24							7.5	20	6.5	.99		
25							7.0	16	5.9	1.4		
26							7.0	17	5.7	1.9		
27							8.0	16	5.1	1.2		
28							9.5	19	4.9	.93		
29							11	19	4.4	.81		
30							8.0	19	4.3	.99		
31							---	19	---	.81		
TOTAL							123.30	479.5	336.1	62.54		
MEAN							4.11	15.5	11.2	2.02		
MAX							11	28	18	4.9		
MIN							.42	7.0	4.3	.81		
AC-FT							245	951	667	124		

09172700 GURLEY DITCH NEAR NORWOOD, CO

LOCATION.--Lat 38°00'54", long 108°14'27", in SE¼NE¼ sec.1, T.43 N., R.13 W., San Miguel County, Hydrologic Unit 14030003, on right bank 0.9 mi (1.4 km) upstream from Gurley Reservoir and 8.4 mi (13.5 km) south of Norwood.

PERIOD OF RECORD.--May 1975 to September 1980 (irrigation season only), (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,340 ft (2,542 m), from topographic map.

REMARKS.--Records good. Gurley ditch diverts water from tributaries of Beaver Creek to Gurley Reservoir. Water is used for irrigation of lands near Norwood. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 392 ft³/s (11.1 m³/s) June 5, 1975; no flow at times most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							.00	45	142	118	10	6.0
2							.00	35	166	120	12	5.5
3							.00	37	209	97	11	5.0
4							.00	59	245	86	10	4.5
5							.00	80	245	75	12	4.5
6							.00	86	261	67	10	5.5
7							.00	112	236	64	8.0	12
8							.00	120	210	63	7.5	9.6
9							.00	133	224	58	7.5	18
10							.00	106	219	51	8.5	18
11							.00	126	183	47	6.5	27
12							.00	93	147	47	7.5	14
13							.00	72	130	47	9.0	10
14							.00	70	136	44	9.0	8.0
15							.00	66	180	37	19	7.0
16							.00	63	224	34	11	6.0
17							.00	81	233	31	8.0	5.0
18							.00	85	224	28	7.0	5.0
19							.00	118	148	27	7.0	5.5
20							.00	178	153	25	6.5	5.5
21							.00	245	176	22	7.0	5.0
22							14	252	200	22	7.0	4.5
23							34	217	186	22	7.5	4.5
24							30	144	173	21	17	4.5
25							28	93	161	22	18	4.5
26							26	106	195	28	11	4.0
27							30	140	150	21	9.0	4.5
28							34	168	133	16	8.0	4.0
29							49	185	118	15	7.0	3.8
30							62	170	114	15	6.5	3.8
31							---	136	---	12	6.0	---
TOTAL							307.00	3621	5481	1382	287.0	224.7
MEAN							10.2	117	183	44.6	9.26	7.49
MAX							62	252	261	120	19	27
MIN							.00	35	114	12	6.0	3.8
AC-FT							609	7180	10870	2740	569	446

09172800 WEST BEAVER CREEK NEAR NORWOOD, CO

LOCATION.--Lat 37°53'21", long 108°11'49", San Miguel County, Hydrologic Unit 14030003, on left bank 75 ft (23 m) downstream from trail bridge and 17.5 mi (28.2 km) southeast of Norwood.

DRAINAGE AREA.--4.83 mi² (12.51 km²).

PERIOD OF RECORD.--April 1976 to July 1980 (seasonal records only), (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 9,750 ft (2,972 m), from topographic map.

period, period and period of no gage-height record, diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 101 ft³/s (2.86 m³/s) June 6, 1979, gage height, 3.61 ft (1.100 m); maximum gage height, 5.83 ft (1.777 m) May 2, 1977 (backwater from ice); minimum daily discharge, 0.34 ft³/s (0.010 m³/s) Apr. 2, 3, 1980.

EXTREMES FOR CURRENT SEASON.--Maximum discharge, 99 ft³/s (2.80 m³/s) at 2000 June 10, gage height, 3.62 ft (1.103 m); minimum daily, 0.34 ft³/s (0.010 m³/s) Apr. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							.38	10	71	25		
2							.34	8.0	70	22		
3							.34	13	75	18		
4							.38	19	78	16		
5							.40	23	79	15		
6							.40	23	76	13		
7							.40	25	74	12		
8							.40	26	73	12		
9							.50	24	77	11		
10							.60	13	82	9.6		
11							.70	11	79	9.1		
12							.80	8.2	75	8.7		
13							1.0	6.5	71	8.2		
14							1.3	6.2	67	7.9		
15							1.9	5.1	59	7.5		
16							2.6	4.6	56	6.8		
17							3.0	6.2	54	6.2		
18							3.6	6.8	56	5.8		
19							4.0	12	53	5.1		
20							5.5	30	49	5.1		
21							6.5	46	45	5.1		
22							7.0	62	41	4.8		
23							7.0	67	39	4.6		
24							6.0	55	37	4.3		
25							5.5	40	34	4.6		
26							5.0	40	32	5.1		
27							5.5	47	32	4.3		
28							6.5	58	27	3.8		
29							8.5	64	23	3.6		
30							11	67	22	3.8		
31							---	69	---	3.6		
TOTAL							97.04	895.6	1706	271.6		
MEAN							3.23	28.9	56.9	8.76		
MAX							11	69	82	25		
MIN							.34	4.6	22	3.6		
AC-FT							192	1780	3380	539		

09173000 BEAVER CREEK NEAR NORWOOD, CO

LOCATION.--Lat 37°58'13", Long 108°11'42", in NE¼SW¼ sec.21, T.43 N., R.12 W., San Miguel County, Hydrologic Unit 14030003, on right bank 250 ft (76 m) downstream from county road culvert, 550 ft (170 m) upstream from Goat Creek, and 13 mi (21 km) southeast of Norwood.

DRAINAGE AREA.--40.6 mi² (105.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1941 to September 1961, October 1962 to September 1967, April 1975 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 8,010 ft (2,441 m), from topographic map. Prior to July 16, 1952, at site 135 ft (41 m) downstream at different datums. July 17, 1952, to Sept. 30, 1961, at site 85 ft (26 m) downstream at different datum. Oct. 1, 1962, to Sept. 30, 1967, at site 200 ft (61 m) upstream at datum 8,016.81 ft (2,443.524 m) above mean sea level (Water and Power Resources Service bench mark). Datum lowered 2.00 ft (0.610 m) Oct. 1, 1948, and raised 8.00 ft (2.438 m) Oct. 1, 1962. Concrete control July 16, 1964, to Sept. 30, 1967.

REMARKS.--Records good except those for winter period, which are poor. Gurley ditch (station 09172700) diverts water above station to Gurley Reservoir, capacity, 8,800 acre-ft (10.9 hm³); prior to September 1948, 3,200 acre-ft (3.95 hm³), for irrigation of about 12,000 acres (48.6 km²) in Naturita Creek drainage.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--30 years (water years 1942-61, 1963-67, 1976-80), 15.4 ft³/s (0.436 m³/s), 11,160 acre-ft/yr (13.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 750 ft³/s (21.2 m³/s) June 9 or 10, 1952, gage height, 5.67 ft (1.728 m), from floodmarks, site and datum then in use, from rating curve extended above 370 ft³/s (10 m³/s); no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 171 ft³/s (4.84 m³/s) at 2100 May 22, gage height, 4.56 ft (1.390 m); no flow Sept. 3-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.32	1.7	1.2	2.0	1.5	1.5	2.0	56	110	3.7	3.3	.06
2	.32	1.4	1.2	2.0	1.5	1.5	2.0	45	105	3.5	3.2	.02
3	.32	1.4	1.3	2.0	1.5	1.5	2.0	47	114	2.6	2.8	.00
4	.35	1.2	1.3	2.0	1.5	1.5	2.0	62	130	2.2	2.8	.00
5	.35	1.2	1.3	2.0	1.5	1.5	2.0	84	138	2.0	1.4	.00
6	.38	1.2	1.3	2.0	1.5	1.5	2.0	90	126	1.7	.80	.00
7	.38	1.3	1.3	2.0	1.5	1.5	2.0	113	122	1.9	1.5	.22
8	.38	1.4	1.4	2.0	1.5	1.5	2.0	119	130	1.9	1.8	.52
9	.40	1.4	1.5	2.0	1.5	1.5	2.0	109	132	1.6	1.9	.87
10	.44	1.3	1.5	2.0	1.5	1.5	2.0	102	134	1.4	.76	1.0
11	.44	1.2	1.5	2.0	1.5	1.5	2.0	120	140	1.3	.35	1.0
12	.44	1.2	1.5	2.0	1.5	1.5	2.0	88	138	1.3	.20	.94
13	.46	1.2	1.5	2.0	1.5	1.5	2.0	68	135	1.4	.20	.68
14	.44	1.2	1.5	2.0	1.5	1.5	2.5	63	128	1.4	.20	.48
15	.48	1.4	1.6	2.0	2.0	1.5	3.0	53	101	1.0	.60	.72
16	.52	1.4	1.6	2.0	2.0	2.0	5.0	50	43	.80	.48	1.1
17	.52	1.4	1.6	2.0	2.0	2.0	10	66	20	.76	.32	1.1
18	.60	1.4	1.7	2.0	3.0	2.0	15	64	33	.72	.20	1.0
19	.64	1.5	1.8	2.0	3.0	2.0	20	78	59	.72	.15	.76
20	.80	1.6	1.9	1.5	2.5	2.0	25	95	28	.68	.08	.38
21	2.1	1.6	2.0	1.5	2.0	2.0	30	102	15	.60	.08	.25
22	1.8	1.4	2.0	1.5	2.0	2.0	45	141	14	.56	.04	.18
23	1.7	1.3	2.0	1.5	2.0	2.0	65	142	12	.60	.06	.18
24	2.1	1.2	2.0	1.5	2.0	2.0	58	132	11	.76	.38	.18
25	2.0	1.6	2.0	1.5	2.0	2.0	41	117	9.4	.80	.80	.20
26	1.9	1.7	2.0	1.5	1.5	2.0	39	109	9.2	1.2	.60	.20
27	2.0	1.7	2.0	1.5	1.5	2.0	42	96	8.6	1.2	.38	.25
28	2.0	1.5	2.0	1.5	1.5	2.0	51	104	4.3	1.2	.28	.22
29	2.2	1.5	2.0	1.5	1.5	2.0	67	110	3.3	1.2	.18	.25
30	2.2	1.5	2.0	1.5	---	2.0	81	112	3.0	2.5	.12	.28
31	2.3	---	2.0	1.5	---	2.0	---	119	---	2.5	.06	---
TOTAL	31.26	42.0	51.5	56.0	51.5	54.5	629.5	2856	2147.0	45.70	26.10	13.04
MEAN	1.01	1.40	1.66	1.81	1.78	1.76	20.9	92.1	71.6	1.47	.84	.43
MAX	2.3	1.7	2.0	2.0	3.0	2.0	81	142	140	3.7	3.3	1.1
MIN	.32	1.2	1.2	1.5	1.5	1.5	2.0	45	3.0	.56	.04	.00
AC-FT	62	83	102	111	102	108	1240	5660	4260	91	52	26

CAL YR 1979 TOTAL 7362.27 MEAN 20.2 MAX 217 MIN .00 AC-FT 14600
WTR YR 1980 TOTAL 6000.90 MEAN 16.4 MAX 142 MIN .00 AC-FT 11900

NOTE.--NO GAGE-HEIGHT RECORD NOV. 29 TO APR. 23.

09173000 BEAVER CREEK NEAR NORWOOD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT											
01...	1215	.30	360	7.9	11.0	1.4	8.2	17	K8	K12	160
24...	1040	1.9	281	8.0	3.0	—	9.7	11	K18	K24	130
NOV											
27...	1310	1.7	290	8.4	1.0	—	10.5	12	K3	K6	140
MAR											
26...	0840	E2.0	280	7.7	.0	—	10.8	8	<1	K3	130
APR											
28...	1320	44	200	7.5	4.0	—	9.8	12	K2	52	82
JUN											
02...	1430	106	100	7.6	9.0	18	8.5	20	—	—	59
04...	1030	132	85	7.5	8.5	—	8.7	17	K1	K6	45
18...	1350	19	160	7.3	16.0	—	7.3	17	K2	32	72
JUL											
07...	1420	2.7	270	8.3	18.0	—	7.1	12	70	44	120
AUG											
04...	1150	3.5	260	7.9	17.0	—	7.1	10	K74	84	100
SEP											
02...	1230	.03	315	7.9	14.0	—	7.4	2	K100	K13	140

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT											
01...	31	45	11	6.0	.2	1.1	130	27	1.5	.2	9.4
24...	7	37	8.4	5.0	.2	1.0	120	23	1.4	.1	9.1
NOV											
27...	12	41	9.7	6.4	.2	1.0	130	23	1.4	.1	10
MAR											
26...	16	37	8.2	5.0	.2	.8	110	41	.8	.1	9.1
APR											
28...	17	24	5.4	4.1	.2	.9	65	17	.9	.2	8.4
JUN											
02...	8	17	3.9	4.8	.4	.6	74	9.6	.4	.0	7.8
04...	9	13	3.0	1.9	.1	.4	36	4.7	.8	.1	7.3
18...	9	21	4.7	4.1	.2	.4	63	19	3.0	.1	8.4
JUL											
07...	35	30	8.8	4.9	.2	1.1	96	42	2.1	.1	9.9
AUG											
04...	12	30	6.6	4.9	.2	1.1	90	25	1.5	.2	9.7
SEP											
02...	14	42	9.5	5.6	.2	1.3	130	25	2.7	.1	9.2

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT											
01...	182	192	.25	.15	.00	.000	.26	.26	.26	.000	.010
24...	169	157	.23	.87	.02	.020	.53	.55	.57	.000	.000
NOV											
27...	166	171	.23	.76	.07	.020	.28	.30	.37	.010	.000
MAR											
26...	161	160	.22	E.87	.09	.000	.41	.41	.50	.010	.010
APR											
28...	100	100	.14	11.9	.52	.030	.68	.71	1.2	.050	.010
JUN											
02...	70	86	.10	19.7	.04	.000	.48	.48	.52	.020	.000
04...	61	53	.08	21.7	.92	.130	.48	.59	1.5	.000	.000
18...	106	95	.14	5.4	.02	.000	.49	.49	.51	.020	.010
JUL											
07...	204	165	.28	1.4	.00	.000	.49	.49	.49	.010	.010
AUG											
04...	140	133	.20	1.4	.02	.000	.47	.47	.49	.010	.010
SEP											
02...	161	174	.22	.01	.00	.000	.43	.43	.43	.160	.000

E ESTIMATED.
K BASED ON NON-IDEAL COLONY COUNT.

BEST DOCUMENT AVAILABLE

09173000 BEAVER CREEK NEAR NORWOOD, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	BIOMASS CHLORO-PHYLL RATIO PERI-PHYTON (UNITS)
OCT										
01...	20	< 10	6.4	.5	26	4.96	5.35	.170	.000	2296
24...	20	30	4.5	.1	150	--	--	--	--	--
NOV										
27...	10	60	15	.4	310	--	--	--	--	--
MAR										
26...	20	15	4.3	.4	81	--	--	--	--	--
APR										
28...	0	60	6.0	.1	26	--	--	--	--	--
JUN										
02...	20	120	7.7	.5	290	.551	.787	.110	.000	2145
04...	30	70	7.9	--	39	--	--	--	--	--
10...	30	40	9.3	.3	64	--	--	--	--	--
JUL										
07...	50	30	8.2	.0	430	--	--	--	--	--
AUG										
04...	20	40	5.2	.2	100	36.0	38.6	1.46	.110	1781
SEP										
02...	20	10	7.5	.3	350	--	--	--	--	--

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BERYL-LIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
OCT											
01...	1215	0	1	1	--	100	70	--	0	< 1	--
MAR											
26...	0840	0	--	0	--	--	60	--	--	< 1	--
JUN											
02...	1430	180	40	1	6	0	30	100	0	< 1	0

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)
OCT											
01...	0	5	--	0	10	--	0	< 3	--	< 10	--
MAR											
26...	--	< 1	--	--	0	--	--	< 3	--	< 10	--
JUN											
02...	0	5	1	0	0	5	1	< 3	10	< 10	10

09173000 BEAVER CREEK NEAR NORWOOD, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)
OCT											
01...	0	0	--	0	0	20	3	--	.0	.0	--
MAR											
26...	--	< 10	--	--	4	--	< 1	--	--	.0	--
JUN											
02...	3	0	10	40	< 4	30	8	290	.1	.0	.0

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	MOLYB-DENUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)
OCT											
01...	0	< 10	--	0	0	--	0	0	--	3100	< 6.0
MAR											
26...	--	< 10	--	--	2	--	--	0	--	260	< 6.0
JUN											
02...	2	< 10	5	0	2	10	0	0	0	75	< 6.0

DATE	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
OCT											
01...	0	< 3	--	< 2.3	< .3	< 3.4	< .4	2.0	< .4	2.0	< .4
MAR											
26...	--	3	--	--	--	--	--	--	--	--	--
JUN											
02...	20	8	40	< .6	1.0	< .9	1.4	1.9	1.3	1.8	1.2

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
01...	1215	.30	2	.00
24...	1040	1.9	3	.02
NOV				
27...	1310	1.7	3	.01
MAR				
26...	0840	E2.0	1	.00
APR				
28...	1320	44	31	3.7
JUN				
02...	1430	104	31	8.7
04...	1030	132	33	12
18...	1330	19	13	.67
JUL				
07...	1420	2.7	3	.02
AUG				
04...	1150	3.5	5	.05

E ESTIMATED.

BEST DOCUMENT AVAILABLE

09173000 BEAVER CREEK NEAR NORWOOD, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	OCT 1,79	OCT 29,79	NOV 27,79	MAR 26,80	APR 28,80	JUN 2,80
TIME	1215	1040	1310	0840	1320	1430
TOTAL CELLS/ML	26	150	310	81	26	250
DIVERSITY: DIVISION	0.0	0.7	0.5	0.0	0.0	0.5
.CLASS	0.0	0.7	0.5	0.0	0.0	0.5
..ORDER	0.0	0.7	0.5	0.0	0.0	0.5
...FAMILY	1.0	0.7	0.5	0.0	0.0	1.0
....GENUS	1.0	0.7	0.7	2.1	1.0	2.8

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...OOCYSTACEAE												
....CHODATELLA	--	-	--	-	--	-	--	-	--	-	--	-
....TETRAEDRON	--	-	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	--	-	--	-	--	-	--	-	--	-	27	11
....MELOSIRA	--	-	--	-	--	-	--	-	--	-	--	-
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	--	-	--	-	--	-	--	-	13*	50	27	11
....COCCONEIS	--	-	--	-	--	-	--	-	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	--	-	--	-	13*	50	--	-
...CYMBELLACEAE												
....CYMBELLA	--	-	--	-	5	2	--	-	--	-	14	6
...FRAGILARIACEAE												
....SYNEDRA	--	-	--	-	5	2	5	6	--	-	--	-
...GOMPHONEMATACEAE												
....GOMPHONEMA	13*	50	--	-	--	-	35*	44	--	-	14	6
...MERIDIONACEAE												
....MERIDION	--	-	--	-	--	-	15*	19	--	-	--	-
...NAVICULACEAE												
....NAVICULA	--	-	--	-	5	2	10	13	--	-	69*	28
...NITZSCHIACEAE												
....NITZSCHIA	13*	50	26*	17	20	7	15*	19	--	-	41*	17
...SURIRELLACEAE												
....SURIRELLA	--	-	--	-	--	-	--	-	--	-	27	11
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	--	-	--	-	--	-	--	-	--	-
....COCCOCHLORIS	--	-	--	-	--	-	--	-	--	-	27	11
..HORMOGONALES												
...NOSTOCACEAE												
....ANABAENA	--	-	130*	83	270*	89	--	-	--	-	--	-
...OSCILLATORIACEAE												
....OSCILLATORIA	--	-	--	-	--	-	--	-	--	-	--	-
...RIVULARIACEAE												
....RAPHIDIOPSIS	--	-	--	-	--	-	--	-	--	-	--	-

NOTE: * - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
- OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

BEST DOCUMENT AVAILABLE

09173000 BEAVER CREEK NEAR NORWOOD, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	JUN 4.80	JUN 18.80	JUL 7.80	AUG 4.80	SEP 2.80
TIME	1030	1350	1420	1150	1230
TOTAL CELLS/ML	39	64	430	100	350
DIVERSITY: DIVISION	0.0	0.7	0.7	0.5	0.8
.CLASS	0.0	0.7	0.7	0.5	0.8
..ORDER	0.0	1.4	0.9	0.5	1.3
...FAMILY	1.6	1.9	1.9	2.0	2.5
....GENUS	1.6	1.9	1.9	2.0	2.7

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...OOCYSTACEAE										
....CHODATELLA	--	-	--	-	--	-	13	13	--	-
....TETRAEDRON	--	-	13^{3}	20	--	-	--	-	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	13^{3}	20	29	7	--	-	26	7
....MELOSIRA	--	-	--	-	--	-	--	-	26	7
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	13^{3}	33	--	-	--	-	--	-	--	-
....COCCONEIS	--	-	--	-	14	3	13	13	26	7
....RHOICOSPHENIA	--	-	--	-	14	3	--	-	--	-
...CYMBELLACEAE										
....CYMBELLA	--	-	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
....SYNEDRA	--	-	--	-	--	-	13	13	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	--	-	14	3	--	-	51	15
...MERIDIONACEAE										
....MERIDION	--	-	--	-	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	13^{3}	33	26^{3}	40	14	3	13	13	64^{3}	19
...NITZSCHIACEAE										
....NITZSCHIA	--	-	--	-	--	-	51^{3}	50	77^{3}	22
...SURIRELLACEAE										
....SURIRELLA	13^{3}	33	13^{3}	20	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	--	-	--	-	77^{3}	22
....COCCOCHLORIS	--	-	--	-	--	-	--	-	--	-
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	--	-	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	--	-	220^{3}	50	--	-	--	-
...RIVULARIACEAE										
....RAPHIDIOPSIS	--	-	--	-	130^{3}	30	--	-	--	-

NOTE: ^{3} - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

BEST DOCUMENT AVAILABLE

09174700 WEST NATURITA CREEK AT UPPER STATION, NEAR NORWOOD, CO

LOCATION.--Lat 37°54'39", long 108°20'08", unsurveyed, San Miguel County, Hydrologic Unit 14030003, on left bank 1,000 ft (300 m) downstream from Spectacle Creek and 22 mi (35 km) southwest of Norwood.

DRAINAGE AREA.--7.31 mi² (18.93 km²).

PERIOD OF RECORD.--May 1975 to July 1980 (seasonal record only), (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 8,180 ft (2,490 m), from topographic map.

REMARKS.--Records good. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 96 ft³/s (2.72 m³/s) June 3, 1975, gage height, 2.28 ft (0.695 m); minimum daily, 0.40 ft³/s (0.011 m³/s) Apr. 2-4, July 10, 1977.

EXTREMES FOR CURRENT SEASON.--Maximum discharge, 56 ft³/s (1.59 m³/s) at 2200 May 22, gage height, 2.00 ft (0.610 m); minimum daily, 0.68 ft³/s (0.019 m³/s) Apr. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							.76	12	44	9.6		
2							.68	11	38	8.8		
3							.68	11	38	8.4		
4							.72	13	42	7.7		
5							.80	14	43	7.2		
6							.80	14	44	6.6		
7							.80	23	40	6.6		
8							.80	27	40	6.0		
9							.98	21	42	5.8		
10							1.3	20	44	5.2		
11							1.6	20	44	5.0		
12							1.6	18	42	4.6		
13							2.0	15	34	4.6		
14							2.6	15	27	4.4		
15							3.8	15	22	4.2		
16							4.8	15	21	3.8		
17							5.8	16	22	3.6		
18							7.2	16	21	3.4		
19							8.8	20	20	3.2		
20							12	33	17	3.0		
21							13	45	13	2.9		
22							15	45	13	2.9		
23							15	48	13	2.9		
24							13	47	12	2.8		
25							11	36	12	2.8		
26							11	31	11	3.0		
27							13	33	11	2.4		
28							14	42	10	2.3		
29							17	48	10	2.2		
30							13	51	9.2	2.2		
31							---	48	---	2.0		
TOTAL							193.52	823	799.2	140.1		
MEAN							6.45	26.5	26.6	4.52		
MAX							17	51	44	9.6		
MIN							.68	11	9.2	2.0		
AC-FT							384	1630	1590	278		

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO

LOCATION.--Lat 37°58'33", long 108°19'38", in SW¼NW¼ sec.20, T.43 N., R.13 W., San Miguel County, Hydrologic Unit 14030003, on right bank 500 ft (150 m) downstream from Middle Naturita Creek, 0.4 mi (0.6 km) downstream from Miramonte Reservoir, and 11 mi (18 km) south of Norwood.

DRAINAGE AREA.--53.0 mi² (137.3 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1940 to September 1952, April 1975 to September 1980 (discontinued). Prior to April 1975, published as "Naturita Creek near Norwood." Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WDR CO-75-2: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,601 ft (2,317 m), from topographic map.

REMARKS.--Records good. Many small diversions above station for irrigation of few hundred acres above and below station and diversion by Lilyland Canal to Dry Creek basin for few hundred acres; flow regulated by Miramonte Reservoir, capacity, 6,800 acre-ft (8.38 hm³). Small Colorado Fish and Game Department lake would have very little effect on flow. Several observations of water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--17 years (water years 1941-52, 1976-80), 9.32 ft³/s (0.264 m³/s), 6,750 acre-ft/yr (8.32 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 943 ft³/s (26.7 m³/s) July 24, 1945, gage height, 5.19 ft (1.582 m), site and datum then in use, from rating curve extended above 200 ft³/s (5.7 m³/s), on basis of slope-area measurement at gage height 4.80 ft (1.463 m); no flow at times in 1945, 1948, 1950-51.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 116 ft³/s (3.28 m³/s) at 2100 Apr. 21, gage height, 4.60 ft (1.402 m); minimum daily, 0.88 ft³/s (0.025 m³/s) Oct. 11-17, Dec. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.92	1.0	1.0	1.1	1.3	2.1	2.4	56	33	3.3	1.4	1.1
2	.92	1.0	1.0	1.1	1.3	2.4	2.4	52	31	3.9	1.3	1.1
3	.92	1.0	1.0	1.1	1.3	2.4	2.4	48	28	3.2	1.3	1.1
4	.92	1.0	1.0	1.1	1.3	2.2	2.6	45	26	2.8	1.3	1.1
5	.92	1.1	1.0	1.1	1.3	2.1	3.4	45	25	2.4	1.3	1.1
6	.92	1.0	1.0	1.1	1.3	2.1	4.6	44	25	2.2	1.2	1.2
7	.92	1.1	1.0	1.1	1.3	2.1	4.8	51	26	2.3	1.2	1.1
8	.92	1.1	1.0	1.1	1.3	2.2	4.3	57	26	2.4	1.3	1.2
9	.92	1.1	1.0	1.1	1.3	2.1	5.4	58	27	2.3	1.3	1.3
10	.92	1.1	1.0	1.1	1.3	2.1	9.9	54	28	2.2	1.2	1.3
11	.88	1.1	1.0	1.1	1.2	2.1	14	64	27	2.1	1.2	1.2
12	.88	1.0	1.0	1.2	1.2	2.1	14	71	27	2.0	1.2	1.2
13	.88	1.0	.92	1.5	1.2	2.1	17	64	26	2.1	1.2	1.2
14	.88	1.0	.88	1.8	1.5	2.3	23	57	23	2.0	1.2	1.1
15	.88	1.0	.92	1.8	2.1	2.2	32	56	20	2.0	1.3	1.1
16	.88	1.0	.92	1.7	2.5	2.0	45	56	18	1.9	1.2	1.1
17	.88	1.0	.92	1.7	2.3	2.1	59	55	17	1.9	1.2	1.1
18	.92	1.1	.92	1.7	3.4	2.1	69	53	15	1.9	1.2	1.1
19	.92	1.1	.92	1.6	11	2.1	74	51	13	1.9	1.2	1.1
20	1.2	1.1	.96	1.5	5.3	2.2	82	55	11	1.9	1.2	1.0
21	1.5	1.1	1.0	1.4	3.0	2.5	100	62	9.0	1.9	1.2	1.0
22	1.2	1.1	1.1	1.4	2.5	2.4	100	63	7.8	1.9	1.1	1.0
23	1.1	1.1	1.1	1.4	2.3	2.4	91	67	6.6	1.9	1.2	1.0
24	1.0	1.1	1.1	1.3	2.0	2.4	87	68	5.3	1.9	1.3	1.1
25	1.0	1.1	1.1	1.3	2.0	2.4	69	64	4.0	1.9	1.2	1.1
26	1.0	1.1	1.2	1.3	1.9	2.4	60	56	3.0	2.0	1.2	1.1
27	1.0	1.2	1.2	1.4	2.0	2.4	54	49	2.6	1.8	1.2	1.1
28	1.0	1.1	1.2	1.4	2.1	2.4	49	43	2.4	1.8	1.1	1.0
29	1.1	1.0	1.1	1.4	2.1	2.4	50	41	2.4	1.8	1.1	1.0
30	1.1	1.0	1.1	1.4	---	2.3	62	40	2.4	1.5	1.1	1.0
31	1.1	---	1.1	1.3	---	2.4	---	35	---	1.4	1.1	---
TOTAL	30.50	31.8	31.66	41.6	64.6	69.5	1193.2	1680	517.5	66.5	37.7	33.2
MEAN	.98	1.06	1.02	1.34	2.23	2.24	39.8	54.2	17.3	2.15	1.22	1.11
MAX	1.5	1.2	1.2	1.8	11	2.5	100	71	33	3.9	1.4	1.3
MIN	.88	1.0	.88	1.1	1.2	2.0	2.4	35	2.4	1.4	1.1	1.0
AC-FT	60	63	63	83	128	138	2370	3330	1030	132	75	66

CAL YR 1979 TOTAL 4356.44 MEAN 11.9 MAX 131 MIN .84 AC-FT 8640
WTR YR 1980 TOTAL 3797.76 MEAN 10.4 MAX 100 MIN .88 AC-FT 7530

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)
OCT											
01...	1030	.88	730	8.1	14.0	1.2	7.9	--	64	46	310
29...	0935	.96	791	8.1	7.0	--	9.4	17	49	K19	320
NOV											
27...	1400	1.2	772	8.2	4.0	--	9.0	23	< 2	K7	330
JAN											
09...	0910	1.0	790	7.8	2.0	--	10.2	19	< 1	K1	340
FEB											
11...	1400	1.2	800	8.1	3.0	--	10.0	12	< 1	K100	340
MAR											
26...	1010	2.5	700	7.9	.0	--	10.6	16	< 1	K6	350
APR											
28...	1400	46	500	7.9	8.0	--	8.9	27	K2	K44	230
JUN											
02...	1545	31	500	7.6	12.0	2.9	7.8	27	K8	K6	280
JUL											
09...	1500	2.0	750	8.1	25.0	--	6.3	14	104	160	360
AUG											
04...	1445	1.2	750	8.4	23.0	--	6.2	18	92	100	350

DATE	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)
OCT											
01...	170	65	36	39	1.1	3.3	140	240	7.3	.0	6.1
29...	150	71	35	34	.8	3.5	170	240	7.6	.2	7.4
NOV											
27...	150	76	34	35	.8	3.3	180	220	7.4	.2	8.1
JAN											
09...	180	76	36	35	.9	2.9	160	230	8.0	.2	7.1
FEB											
11...	160	79	34	29	.7	2.5	180	230	7.5	.2	7.9
MAR											
26...	160	83	35	29	.7	2.4	190	210	7.0	.2	8.7
APR											
28...	130	50	25	28	.8	2.7	100	140	6.3	.2	9.5
JUN											
02...	120	62	30	29	.8	3.0	160	180	5.5	.0	6.2
JUL											
09...	170	78	41	32	.7	3.5	190	220	6.6	.3	8.6
AUG											
04...	190	72	41	35	.8	3.8	160	260	7.4	.4	7.4

DATE	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)
OCT											
01...	422	488	.57	1.0	.01	.010	.43	.44	.45	.000	.000
29...	596	501	.81	1.5	.02	.030	.72	.75	.77	.000	.000
NOV											
27...	512	492	.70	1.6	.04	.020	.45	.47	.51	.020	.000
JAN											
09...	533	500	.72	1.4	.06	.020	.71	.73	.79	.020	.010
FEB											
11...	533	498	.72	1.7	.08	.080	.57	.65	.73	.010	.000
MAR											
26...	529	488	.72	3.5	.08	.020	.68	.70	.78	.010	.010
APR											
28...	319	318	.43	39.6	.10	.040	.66	.70	.80	.050	.010
JUN											
02...	429	413	.58	35.9	.00	.020	.56	.58	.58	.010	.000
JUL											
09...	559	504	.76	3.0	.00	.000	.88	.88	.88	.030	.010
AUG											
04...	558	523	.76	1.8	.01	.000	.62	.62	.63	.010	.010

K BASED ON NON-IDEAL COLONY COUNT.

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHYTOPLANKTON, TOTAL (CELLS PER ML)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	BIOMASS CHLOROPHYLL RATIO PERIPHYTON (UNITS)
OCT 01...	60	90	13	.5	64	2.05	2.44	2.68	.310	146
29...	60	20	9.6	.1	220	--	--	--	--	--
NOV 27...	50	20	21	.3	400	--	--	--	--	--
JAN 09...	50	10	13	.1	340	--	--	--	--	--
FEB 11...	40	< 10	5.1	.4	86	2.60	2.91	.760	.000	408
MAR 26...	50	19	9.0	.6	670	--	--	--	--	--
APR 28...	50	30	6.5	.8	540	--	--	--	--	--
JUN 02...	50	13	11	.8	1900	--	--	--	--	--
JUL 09...	70	20	9.2	.2	720	--	--	--	--	--
AUG 04...	70	20	8.1	.2	130	3.54	5.98	4.23	.740	577

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOTTOM MATERIAL (UG/G AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	BERYLLIUM, RECOV. FM BOTTOM MATERIAL (UG/G)
OCT 01...	1030	110	1	1	59	0	70	100	0	< 1	0
JAN 09...	0910	10	--	1	--	--	70	--	--	< 1	--
MAR 26...	1010	0	--	0	--	--	70	--	--	< 1	--
JUN 02...	1545	30	1	1	--	100	50	--	0	< 1	--

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)
OCT 01...	0	5	0	0	10	3	0	< 3	5	< 10	3
JAN 09...	--	< 1	--	--	0	--	--	4	--	< 10	--
MAR 26...	--	3	--	--	0	--	--	< 3	--	< 10	--
JUN 02...	0	1	--	10	0	--	1	< 3	--	< 10	--

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)
OCT 01...	4	43	0	30	38	60	73	280	.0	.0	.06
JAN 09...	--	0	--	--	27	--	87	--	--	.0	--
MAR 26...	--	20	--	--	27	--	69	--	--	.0	--
JUN 02...	18	21	--	20	24	30	13	--	.1	.1	--

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	MOLYB-DENUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)
OCT											
01...	3	3	0	6	2	5	0	0	0	850	< 6.0
JAN											
09...	--	16	--	--	0	--	--	0	--	830	8.0
MAR											
26...	--	< 10	--	--	0	--	--	0	--	790	< 6.0
JUN											
02...	3	< 10	--	1	4	--	1	1	--	510	< 6.0

DATE	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
OCT											
01...	10	37	30	< 7.5	< .3	< 11	< .4	< 6.6	< .4	< 6.0	< .4
JAN											
09...	--	< 3	--	--	--	--	--	--	--	--	--
MAR											
26...	--	4	--	--	--	--	--	--	--	--	--
JUN											
02...	10	< 3	--	< 4.6	.3	< 6.7	.4	4.3	.5	4.2	.5

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
01...	1030	.88	5	.01
29...	0935	.96	9	.02
NOV				
27...	1400	1.2	17	.06
JAN				
09...	6910	1.0	4	.01
FEB				
11...	1400	1.2	12	.04
MAR				
26...	1010	2.5	12	.08

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
APR				
28...	1400	46	16	2.0
JUN				
02...	1545	31	19	1.6
JUL				
09...	1500	2.0	44	.24
AUG				
04...	1445	1.2	2	.01

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	OCT 1,79	OCT 29,79	NOV 27,79	JAN 9,80	FEB 11,80	MAR 26,80
TIME	1030	0935	1400	0910	1400	1010
TOTAL CELLS/ML	64	220	400	340	86	670
DIVERSITY: DIVISION	0.0	0.0	0.4	0.0	0.5	1.1
.CLASS	0.0	0.0	0.4	0.0	0.5	1.1
..ORDER	0.0	0.3	0.0	0.0	0.5	1.2
...FAMILY	1.0	2.3	0.0	2.1	2.7	2.5
....GENUS	1.4	2.4	0.0	2.3	2.8	2.6

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHARACIACEAE												
....SCHROEDERIA	--	-	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	--	-	--	-	--	-	10	12	20	3
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	--	-	10	1
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	--	-	13	6	--	-	--	-	--	-	5	1
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	--	-	--	-	--	-	--	-	--	-	15	2
....COCCONEIS	13#	20	13	6	25	6	10	3	10	12	5	1
....RHOICOSPHENIA	13#	20	13	6	15	4	20	6	--	-	25	4
...CYMBELLACEAE												
....AMPHORA	--	-	13	6	--	-	--	-	--	-	--	-
....CYMBELLA	--	-	--	-	5	1	5	1	5	6	--	-
....EPITHEMIA	--	-	--	-	--	-	--	-	5	6	--	-
...DIATOMACEAE												
....DIATOMA	--	-	64#	29	50	13	170#	50	15#	18	20	3
...FRAGILARIACEAE												
....ASTERIONELLA	--	-	--	-	--	-	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	150#	36	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	5	1	--	-	--	-	10	1
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	--	-	5	1	30	9	5	6	10	1
...MERIDIONACEAE												
....MERIDION	--	-	--	-	--	-	--	-	--	-	10	1
...NAVICULACEAE												
....NAVICULA	39#	60	39#	18	50	13	55#	16	20#	24	45	7
....PLEUROSIGMA	--	-	--	-	--	-	5	1	--	-	--	-
...NITZSCHIACEAE												
....NITZSCHIA	--	-	64#	29	76#	19	35	10	15#	18	260#	38
...SURIRELLACEAE												
....SURIRELLA	--	-	--	-	--	-	10	3	--	-	30	4
.CHRYSOPHYCEAE												
..CHRYSOMONADALES												
...MALLOMONADACEAE												
....MALLOMONAS	--	-	--	-	--	-	--	-	--	-	--	-
...OCHROMONADACEAE												
....DINOBRYON	--	-	--	-	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE	--	-	--	-	5	1	--	-	--	-	--	-
..CRYPTOMONADALES												
...CRYPTOCHRYSIDACEAE												
....CHROOMONAS	--	-	--	-	--	-	--	-	--	-	--	-
...CRYPTOMONADACEAE												
....CRYPTOMONAS	--	-	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	--	-	--	-	--	-	--	-	--	-
..HORMOGONALES												
...NOSTOCACEAE												
....ANABAENA	--	-	--	-	20	5	--	-	--	-	--	-
...OSCILLATORIACEAE												
....OSCILLATORIA	--	-	--	-	--	-	--	-	--	-	--	-
....SCHIZOTHRIX	--	-	--	-	--	-	--	-	--	-	210#	31

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

BEST DOCUMENT AVAILABLE

09175000 WEST NATURITA CREEK NEAR NORWOOD, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE TIME	APR 28,80 1400	JUN 2,80 1545	JUL 9,80 1900	AUG 4,80 1445	SEP 2,80 1320
TOTAL CELLS/ML	540	1900	720	130	300
DIVERSITY: DIVISION	0.9	0.4	0.7	0.9	1.2
.CLASS	0.9	0.9	0.7	0.9	1.2
..ORDER	1.8	1.5	0.8	0.9	1.2
...FAMILY	2.2	1.9	2.6	2.0	1.8
....GENUS	2.2	1.9	2.7	2.0	1.9

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHARACIACEAE										
....SCHROEDERIA	--	-	39	2	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	52	10	--	-	--	-	--	-	--	-
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-	180*	61
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	52	10	--	-	29	4	--	-	--	-
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	170*	31	270	14	14	2	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	29	4	--	-	--	-
....COCCONEIS	--	-	--	-	160*	22	64*	50	26	9
....RHOICOSPHENIA	--	-	--	-	--	-	--	-	13	4
...CYMBELLACEAE										
....AMPHORA	--	-	--	-	--	-	--	-	--	-
....CYMBELLA	--	-	--	-	14	2	13	10	--	-
....EPITHEMIA	--	-	--	-	--	-	--	-	--	-
...DIATOMACEAE										
....DIATOMA	--	-	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
....ASTERIONELLA	210*	38	1200*	63	--	-	--	-	--	-
....FRAGILARIA	--	-	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	14	2	--	-	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	26	5	--	-	240*	34	26*	20	13	4
...MERIDIONACEAE										
....MERIDION	--	-	--	-	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	--	-	13	1	72	10	--	-	26	9
....PLEUROSIGMA	--	-	--	-	--	-	--	-	--	-
...NITZSCHIACEAE										
....NITZSCHIA	26	5	77	4	72	10	--	-	26	9
...SURIRELLACEAE										
....SURIRELLA	--	-	13	1	--	-	--	-	--	-
.CHRYSOPHYCEAE										
..CHRYSOMONADALES										
...MALLOMONADACEAE										
....MALLOMONAS	--	-	13	1	--	-	--	-	--	-
...OCHROMONADACEAE										
....DINOBRYON	--	-	210	11	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE	--	-	--	-	--	-	--	-	--	-
..CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	13	1	--	-	--	-	--	-
...CRYPTOMONADACEAE										
....CRYPTOMONAS	13	2	26	1	--	-	13	10	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	26	1	--	-	13	10	13	4
..HORMOGONALES										
...NOSTOCACEAE										
....ANABAENA	--	-	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	--	-	72	10	--	-	--	-
....SCHIZOTHRIX	--	-	--	-	--	-	--	-	--	-

NOTE: * - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
- OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09175200 LILYLANDS CANAL NEAR NORWOOD, CO

LOCATION.--Lat 38°01'24", long 108°23'18", in SW¼SW¼ sec.35, T.44 N., R.14 W., San Miguel County, Hydrologic Unit 14030003, on left bank 500 ft (150 m) north of Uncompahgre National Forest Boundary and 8.5 mi (13.7 km) southwest of Norwood.

PERIOD OF RECORD.--May 1975 to September 1980 (irrigation season only), (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 7,940 ft (2,420 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Lilyland Canal diverts water from Naturita Creek and tributaries for irrigation of 500 acres (2.02 km²) east of Dry Creek basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 44 ft³/s (1.25 m³/s) May 22, 1976; no flow many days each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							.00	16	28	13	.52	.02
2							.00	15	28	14	.60	.00
3							.00	15	28	13	2.5	.00
4							.10	17	32	12	2.5	.00
5							.20	18	33	12	2.5	.00
6							.30	22	33	12	2.5	.00
7							.50	30	32	12	2.4	.00
8							.70	34	32	12	2.3	.00
9							1.1	28	33	12	2.3	.00
10							1.8	26	33	12	2.2	.00
11							2.4	26	33	11	2.2	.86
12							3.2	24	32	11	2.1	.43
13							4.4	22	32	10	2.2	.23
14							6.5	20	32	10	2.2	.12
15							8.5	20	34	9.6	2.4	.04
16							11	20	33	9.5	2.2	.01
17							13	22	33	9.4	2.3	.00
18							17	22	33	8.9	2.2	.00
19							20	24	27	8.7	2.2	.00
20							24	24	26	8.3	2.2	.00
21							30	24	26	8.0	2.2	.00
22							30	24	16	6.7	2.2	.00
23							22	22	14	6.2	2.2	.00
24							18	20	14	6.0	3.0	.00
25							16	21	14	5.9	2.5	.00
26							15	20	14	6.1	2.2	.00
27							17	25	14	5.4	1.9	.00
28							20	24	14	5.3	.52	.00
29							22	23	14	2.4	.31	.00
30							19	27	13	1.4	.18	.00
31							---	28	---	.82	.06	---
TOTAL							323.70	703	780	274.62	59.79	1.71
MEAN							10.8	22.7	26.0	8.86	1.93	.057
MAX							30	34	34	14	3.0	.86
MIN							.00	15	13	.82	.06	.00
AC-FT							642	1390	1550	545	119	3.4

NOTE.--NO GAGE-HEIGHT RECORD APR. 1 TO MAY 20.

09175400 MAVERICK DRAW NEAR NORWOOD, CO

LOCATION.--Lat 38°10'32", long 108°19'52", in SW¼SW¼ sec.5, T.45 N., R.13 W., Montrose County, Hydrologic Unit 14030003, on left bank 2.0 mi (3.2 km) upstream from Smugglers ditch headgate and 3.5 mi (5.6 km) northwest of Norwood.

DRAINAGE AREA.--41.3 mi^2 (107.0 km^2).

PERIOD OF RECORD.--April 1975 to September 1980, (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,660 ft (2,030 m), from topographic map.

REMARKS.--Records good. Natural flow of stream affected by diversions for irrigation of 72 acres (291,000 m^2) above station and 35 acres (142,000 m^2) below. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--5 years, 3.36 ft^3/s (0.095 m^3/s), 2,430 acre-ft/yr (3.00 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 107 ft^3/s (3.03 m^3/s) June 9, 1979, gage height, 4.43 ft (1.350 m); minimum daily, 0.03 ft^3/s (0.001 m^3/s) Aug. 29, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 60 ft^3/s (1.70 m^3/s) at 1600 Jan. 15, gage height, 3.60 ft (1.097 m); minimum daily, 1.3 ft^3/s (0.037 m^3/s) Oct. 13-19, 27, 28, Dec. 2, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	1.4	1.4	1.8	2.5	3.3	3.2	7.3	9.1	15	7.7	2.0
2	1.8	1.4	1.3	1.8	2.5	3.2	3.6	6.5	7.7	18	7.7	1.8
3	1.7	1.4	1.4	1.7	2.5	3.2	3.6	4.8	5.1	11	6.8	1.7
4	1.6	1.4	1.5	1.7	2.9	3.7	3.4	3.7	5.1	10	6.1	1.6
5	1.5	1.4	1.6	1.9	3.0	3.8	3.2	3.4	5.4	10	5.1	1.6
6	1.5	1.4	1.4	1.9	2.9	3.6	3.0	3.6	6.0	8.9	4.8	1.7
7	1.8	1.5	1.5	1.6	3.3	3.4	2.9	4.0	5.8	11	4.5	2.0
8	1.6	1.7	1.6	1.9	2.9	3.4	2.8	5.1	6.8	12	4.4	2.2
9	1.6	2.0	1.6	1.9	2.5	3.1	2.8	5.1	6.5	7.5	5.2	2.8
10	1.5	1.7	1.6	2.0	2.4	2.9	2.8	4.0	7.2	4.4	5.0	3.1
11	1.4	1.6	1.7	1.9	2.3	3.1	2.7	4.0	5.8	3.3	3.2	3.8
12	1.4	1.6	1.5	2.3	2.4	3.3	2.7	4.8	8.7	4.6	2.5	2.9
13	1.3	1.5	1.3	6.0	2.4	3.2	2.6	5.1	9.1	4.3	2.6	2.6
14	1.3	1.5	1.4	25	2.9	3.1	2.5	4.7	10	4.4	2.9	2.4
15	1.3	1.4	1.4	12	8.4	3.0	2.4	5.4	13	4.4	4.2	2.3
16	1.3	1.4	1.4	5.7	8.1	2.8	2.5	5.4	16	4.4	3.7	2.1
17	1.3	1.5	1.5	3.9	5.7	2.8	2.3	5.8	16	4.5	3.2	2.1
18	1.3	1.6	1.6	3.9	16	3.1	2.3	6.8	15	3.9	3.2	2.0
19	1.3	1.6	1.6	3.7	17	3.2	2.3	6.0	15	3.4	2.8	2.0
20	1.4	1.6	1.6	3.0	8.3	2.7	2.4	6.1	14	3.3	2.7	1.9
21	2.8	1.6	1.6	2.8	5.8	2.6	2.7	7.7	14	3.7	2.5	2.0
22	2.0	1.4	1.7	2.6	5.4	2.6	3.1	8.1	15	5.0	2.6	1.8
23	1.6	1.4	1.8	2.4	5.0	2.9	3.9	7.3	14	5.8	2.5	2.1
24	1.6	1.5	1.6	2.6	4.0	2.9	5.5	8.5	13	6.0	6.2	2.1
25	1.6	1.6	1.6	2.6	3.8	2.9	4.8	9.5	11	7.3	5.7	2.0
26	1.4	1.6	1.7	2.8	3.7	2.9	3.6	8.5	11	14	4.4	2.0
27	1.3	1.4	1.8	2.7	3.8	3.7	3.1	7.5	11	9.5	3.8	1.8
28	1.3	1.4	1.8	2.6	3.8	3.8	3.2	6.5	11	8.3	3.1	1.6
29	1.4	1.4	1.7	2.6	3.7	3.2	3.3	6.8	13	8.3	2.5	1.7
30	1.5	1.4	1.6	2.9	---	2.9	6.1	9.7	14	8.3	2.1	1.6
31	1.4	---	1.8	2.5	---	3.0	---	10	---	8.7	2.1	---
TOTAL	47.5	45.3	48.6	114.7	139.9	97.3	95.3	191.7	314.3	233.2	125.8	63.3
MEAN	1.53	1.51	1.57	3.70	4.82	3.14	3.18	6.18	10.5	7.52	4.06	2.11
MAX	2.8	2.0	1.8	25	17	3.8	6.1	10	16	18	7.7	3.8
MIN	1.3	1.4	1.3	1.6	2.3	2.6	2.3	3.4	5.1	3.3	2.1	1.6
AC-FT	94	90	96	228	277	193	189	380	623	463	250	126

CAL YR 1979 TOTAL 2190.8 MEAN 6.00 MAX 83 MIN 1.2 AC-FT 4350
WTR YR 1980 TOTAL 1516.9 MEAN 4.14 MAX 25 MIN 1.3 AC-FT 3010

09175500 SAN MIGUEL RIVER AT NATURITA, CO

LOCATION.--Lat 38°13'04", long 108°33'57", in NE1/4NE1/4 sec.30, T.46 N., R.15 W., Montrose County, Hydrologic Unit 14030003, on left bank 20 ft (6 m) downstream from bridge on State Highway 97 in Naturita and 1.2 mi (1.9 km) downstream from Naturita Creek.

DRAINAGE AREA.--1,069 mi² (2,769 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1917 to September 1929, May 1940 to September 1980 (discontinued). Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WRD Colo. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5,392.85 ft (1,643.74 m), National Geodetic Vertical Datum of 1929. Apr. 26, 1918, to Sept. 2, 1926, nonrecording gage, and Sept. 3, 1926, to Sept. 30, 1929, water-stage recorder, at same site at different datums. Oct. 1, 1940, to Dec. 9, 1941, nonrecording gage at present site and datum.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 22,000 acres (89.0 km²) above station and 4,000 acres (16.2 km²) below, and return flow from irrigated areas.

AVERAGE DISCHARGE.--52 years (water years 1918-29, 1941-80), 332 ft³/s (9.402 m³/s), 240,500 acre-ft/yr (297 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,100 ft³/s (201 m³/s) Apr. 15, 1942, gage height, 9.80 ft (2.987 m), from rating curve extended above 3,800 ft³/s (110 m³/s); minimum daily, 1.6 ft³/s (0.045 m³/s) July 16, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,230 ft³/s (91.5 m³/s) at 0830 Apr. 23, gage height, 6.25 ft (1.905 m), only peak above base of 1,800 ft³/s (51 m³/s); minimum daily, 16 ft³/s (0.453 m³/s) Oct. 5, 6.

REVISIONS.--The maximum discharge for water year 1927 has been revised to 3,920 ft³/s (111 m³/s). This figure supersedes that published in WSP 649.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	89	82	70	83	44	79	2170	1300	1040	186	82
2	23	96	79	80	96	37	86	1640	1160	1060	176	76
3	19	104	93	70	110	38	86	1180	1150	974	169	70
4	17	89	108	80	104	53	85	1240	1240	860	155	66
5	16	86	108	70	104	96	86	1440	1390	753	148	64
6	16	88	97	80	99	89	94	1360	1490	608	137	65
7	20	89	89	85	108	96	106	1680	1380	593	135	68
8	19	97	92	95	113	89	101	1740	1310	731	110	75
9	19	99	91	105	123	86	99	1530	1530	655	131	88
10	19	97	83	120	127	93	112	1190	1740	584	125	123
11	23	88	85	120	131	91	127	1320	1940	580	118	173
12	26	80	79	125	137	93	127	1400	1940	526	95	123
13	27	77	85	125	144	83	121	1280	1920	526	104	89
14	26	83	66	125	148	82	131	1220	1870	521	118	69
15	38	82	70	123	161	86	171	1100	1610	457	146	59
16	77	83	70	127	176	89	230	1090	1430	413	157	54
17	82	59	65	104	161	82	306	1150	1270	369	125	44
18	80	43	65	97	159	77	465	992	1380	348	108	39
19	80	43	65	91	208	91	735	920	1560	337	97	34
20	79	41	75	91	186	89	1120	992	1480	320	89	30
21	117	78	80	77	164	88	1650	1090	1340	283	66	29
22	99	86	80	69	159	96	1960	1380	1240	236	59	26
23	88	85	95	66	150	96	2210	1630	1240	241	80	23
24	93	101	85	69	108	89	1840	1600	1250	235	121	23
25	99	106	80	93	97	96	1230	1380	1210	247	247	23
26	94	108	100	101	96	89	1270	1120	1250	277	203	23
27	93	110	110	108	104	89	1270	998	1290	253	190	22
28	93	97	90	99	103	91	1420	992	1180	206	141	24
29	86	93	80	96	72	85	1710	1070	1020	161	117	41
30	93	88	80	99	---	82	2140	1180	976	196	99	44
31	94	---	75	86	---	83	---	1260	---	193	89	---
TOTAL	1780	2565	2602	2946	3731	2566	21167	40294	42086	14783	4029	1769
MEAN	57.4	85.5	83.9	95.0	129	82.8	706	1300	1403	477	130	59.0
MAX	117	110	110	127	208	96	2210	2170	1940	1060	247	173
MIN	16	41	65	66	72	37	79	920	976	161	59	22
AC-FT	3530	5090	5160	5840	7400	5090	41980	79920	83470	29320	7990	3510

CAL YR 1979 TOTAL 169750 MEAN 465 MAX 3230 MIN 16 AC-FT 336700
WTR YR 1980 TOTAL 140316 MEAN 383 MAX 2210 MIN 16 AC-FT 278300

BEST DOCUMENT AVAILABLE

09175500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT										
01...	1215	24	1050	8.0	18.0	.60	7.8	18	K130	--
29...	1200	85	700	8.5	9.0	--	9.7	6	36	K11
NOV										
26...	1600	108	700	8.6	4.0	--	10.7	16	K18	K12
JAN										
07...	1545	E85	690	7.6	1.0	--	11.5	6	K2	K23
FEB										
11...	1515	141	660	8.2	2.0	--	11.3	10	K2	88
12...	1710	133	580	8.1	3.5	25	10.6	17	--	--
MAR										
26...	1615	89	740	8.1	6.0	--	10.2	12	K6	K20
APR										
29...	1700	1140	290	7.7	10.0	--	9.5	35	K30	K70
JUN										
03...	1420	1160	290	7.8	15.0	16	8.1	19	K16	K10
JUL										
08...	1740	786	275	8.0	19.5	--	7.5	8	76	130
AUG										
05...	0650	146	550	7.9	18.0	--	7.6	17	120	K410
SEP										
03...	1350	69	770	8.2	19.0	--	7.7	10	K26	120

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT										
01...	770	580	171	83	82	1.4	4.3	190	740	14
29...	350	220	93	29	28	.7	2.3	130	260	6.8
NOV										
26...	360	230	98	28	30	.7	2.1	130	260	6.6
JAN										
07...	310	190	88	21	22	.6	1.7	120	210	5.7
FEB										
11...	280	170	77	22	22	.6	1.6	110	230	6.3
12...	260	150	76	19	20	.5	1.8	110	200	5.9
MAR										
26...	370	230	93	34	37	.9	2.1	140	300	9.6
APR										
29...	130	55	37	8.7	7.3	.3	2.2	73	55	4.4
JUN										
03...	120	41	36	7.4	6.3	.3	1.1	80	60	1.5
JUL										
08...	120	55	35	7.2	7.3	.3	.9	62	62	1.3
AUG										
05...	250	130	70	19	17	.5	2.0	120	170	4.8
SEP										
03...	330	220	87	27	28	.7	2.4	110	280	5.3

K BASED ON NON-IDEAL COLONY COUNT.
E ESTIMATED.

09179500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)
OCT										
01...	.7	11	1210	1240	1.6	78.4	.03	.040	.45	.49
29...	.3	8.2	530	505	.72	122	.04	.050	.36	.41
NOV										
26...	.3	9.7	518	513	.70	151	.14	.010	.40	.41
JAN										
07...	.3	9.2	466	441	.63	E75.5	.19	.070	.56	.63
FEB										
11...	.2	7.9	449	422	.61	171	.20	.040	.25	.29
12...	.2	8.0	417	394	.57	150	.28	.040	.34	.38
MAR										
24...	.3	7.8	589	568	.80	142	.07	.000	.42	.42
APR										
29...	.2	11	235	171	.32	723	.19	.060	1.1	1.20
JUN										
03...	.0	7.4	175	169	.24	948	.14	.020	.69	.71
JUL										
08...	.2	6.5	178	158	.24	378	.00	.000	1.2	1.20
AUG										
05...	.5	7.2	393	363	.53	159	.02	.000	.62	.62
SEP										
03...	.4	8.7	522	505	.71	97.2	.00	.020	.56	.58

DATE	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)
OCT										
01...	.52	.000	.020	210	10	7.9	.9	270	.200	.000
29...	.45	.000	.000	60	20	3.9	.1	530	--	--
NOV										
26...	.55	.010	.000	50	20	6.5	.0	2000	--	--
JAN										
07...	.82	.010	.010	40	30	9.5	--	970	--	--
FEB										
11...	.49	.020	.000	40	< 10	3.0	.4	1200	--	--
12...	.66	.040	.010	50	< 10	4.5	.4	--	--	--
MAR										
24...	.49	.010	.010	70	< 10	4.5	.4	1200	--	--
APR										
29...	1.4	.190	.030	50	930	9.6	.3	800	--	--
JUN										
03...	.85	.030	.000	20	190	3.9	1.1	64	--	--
JUL										
08...	1.2	.070	.010	10	30	3.2	.1	700	--	--
AUG										
05...	.64	.010	.010	50	20	4.8	.1	640	--	--
SEP										
03...	.58	.200	.000	80	20	9.4	.3	490	--	--

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BERYL-LIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
OCT											
01...	1215	0	2	1	--	100	60	--	0	<1	--
JAN											
07...	1945	30	--	1	--	--	60	--	--	<1	--
FEB											
12...	1710	--	2	--	13	100	--	190	0	--	1
MAR											
24...	1615	0	--	0	--	--	70	--	--	<1	--
JUN											
03...	1420	230	2	1	--	100	40	--	0	<1	--

BEST DOCUMENT AVAILABLE

09175500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)
OCT											
01...	0	6	--	10	10	--	0	< 3	--	< 10	--
JAN											
07...	--	< 1	--	--	0	--	--	< 3	--	< 10	--
FEB											
12...	0	--	3	10	--	4	0	--	15	--	22
MAR											
24...	--	1	--	--	0	--	--	< 3	--	<10	--
JUN											
03...	1	1	--	0	0	--	2	< 3	--	<10	--

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)
OCT											
01...	2	6	--	80	100	20	6	--	.1	.0	--
JAN											
07...	--	0	--	--	23	--	25	--	--	.0	--
FEB											
12...	11	--	130	30	--	120	--	760	.0	--	.0
MAR											
24...	--	19	--	--	38	--	35	--	--	.0	--
JUN											
03...	25	29	--	10	10	110	29	--	.1	.0	--

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	MOLYB-DENUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)
OCT											
01...	6	<10	--	3	6	--	1	1	--	3300	< 6.0
JAN											
07...	--	11	--	--	0	--	--	1	--	1100	< 6.0
FEB											
12...	2	--	0	4	--	0	1	--	1	--	--
MAR											
24...	--	11	--	--	5	--	--	1	--	1300	< 6.0
JUN											
03...	2	<10	--	0	1	--	1	0	--	340	< 6.0

BEST DOCUMENT AVAILABLE

09175500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	GROSS ALPHA, DIS- SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)
OCT											
01...	10	< 3	--	--	--	< 19	< .4	<8.3	< .4	< 8.5	< .4
JAN											
07...	--	22	--	--	--	--	--	--	--	--	--
FEB											
12...	90	--	290	--	--	--	--	--	--	--	--
MAR											
24...	--	3	--	--	--	--	--	--	--	--	--
JUN											
03...	110	28	--	<1.8	1.4	< 2.7	2.1	1.2	1.9	1.2	1.8

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
OCT											
29...	1200	85	28	6.4	--	--	--	--	--	--	--
NOV											
26...	1600	108	14	4.1	--	--	--	--	--	--	--
JAN											
07...	1545	E85	6	.97	--	--	--	--	--	--	--
FEB											
11...	1515	141	29	11	--	--	--	--	--	--	--
MAR											
24...	1615	89	11	2.6	--	--	--	--	--	--	--
APR											
29...	1700	1140	173	532	50	57	76	92	98	100	100
JUN											
03...	1420	1160	60	188	--	--	--	--	--	--	--
JUL											
08...	1740	786	7	15	--	--	--	--	--	--	--
AUG											
05...	0650	146	8	3.2	--	--	--	--	--	--	--
SEP											
03...	1350	69	5	.93	--	--	--	--	--	--	--

09175500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

	OCT 1,79	OCT 29,79	NOV 26,79	JAN 7,80	FEB 11,80	MAR 24,80
DATE / TIME	1450	1200	1600	1545	1515	1615
TOTAL CELLS/ML	270	530	2000	570	1200	1200
DIVERSITY: DIVISION	1.3	0.0	1.0	0.1	0.3	1.5
.CLASS	1.3	0.0	1.0	0.1	0.3	1.5
..ORDER	1.7	0.5	1.2	0.3	0.5	1.5
...FAMILY	2.0	1.3	2.8	3.0	2.9	2.5
....GENUS	2.5	1.5	3.2	3.4	3.3	2.5

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...MICRACTINIACEAE												
....GOLENKINIA	--	-	--	-	--	-	--	-	--	-	--	-
....MICRACTINIUM	--	-	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	--	-	--	-	5	1	40	3	--	-
....OOCYSTIS	--	-	--	-	--	-	--	-	--	-	--	-
....TETRAEDRON	--	-	--	-	--	-	--	-	10	1	--	-
...SCENEDESMACEAE												
....SCENEDESMUS	--	-	--	-	22	1	--	-	20	2	140	12
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	52[3]	19	64	12	22	1	16	3	20	2	--	-
....MELOSIRA	--	-	--	-	55	3	10	2	10	1	--	-
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	13	5	64	12	350[3]	18	47	8	200[3]	17	170	14
....COCCONEIS	--	-	26	5	11	1	--	-	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	--	-	26	5	--	-	--	-
...CYMBELLACEAE												
....AMPHORA	--	-	--	-	--	-	--	-	--	-	--	-
....CYMBELLA	--	-	13	2	88	4	36	6	70	6	200[3]	17
....EPITHEMIA	--	-	--	-	33	2	42	7	50	4	--	-
...DIATOMACEAE												
....DIATOMA	--	-	--	-	33	2	57	10	40	3	--	-
....OPEPHORA	--	-	--	-	--	-	--	-	180	15	--	-
...FRAGILARIACEAE												
....FRAGILARIA	--	-	--	-	11	1	10	2	--	-	--	-
....HANNAEA	--	-	--	-	--	-	--	-	20	2	29	2
....SYNEDRA	--	-	--	-	240	12	68	12	150	12	43	4
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	--	-	22	1	31	5	20	2	14	1
...NAVICULACEAE												
....NAVICULA	13	5	--	-	170	8	47	8	120	10	14	1
...NITZSCHIACEAE												
....NITZSCHIA	26	10	360[3]	68	180	9	150[3]	25	260[3]	21	43	4
...SURIRELLACEAE												
....SURIRELLA	--	-	--	-	44	2	31	5	--	-	14	1
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOMONADACEAE												
....CRYPTOMONAS	--	-	--	-	--	-	--	-	--	-	14	1
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....AGMENELLUM	100[3]	38	--	-	--	-	--	-	--	-	--	-
....ANACYSTIS	39	14	--	-	--	-	--	-	--	-	--	-
..HORMOGONALES												
...OSCILLATORIACEAE												
....LYNGBYA	--	-	--	-	170	8	--	-	--	-	--	-
....OSCILLATORIA	--	-	--	-	530[3]	27	--	-	--	-	500[3]	42
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	26	10	--	-	--	-	--	-	--	-	--	-

NOTE: [3] - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09175500 SAN MIGUEL RIVER AT NATURITA, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	APR 29,80		JUN 3,80		JUL 8,80		AUG 5,80		SEP 3,80	
TIME	1700		1420		1740		0950		1350	
TOTAL CELLS/ML	800		64		700		640		490	
DIVERSITY: DIVISION	1.1		0.7		1.2		0.6		0.9	
.CLASS	1.1		0.7		1.2		0.6		0.9	
..ORDER	1.3		0.7		1.3		0.7		1.2	
...FAMILY	1.8		2.3		1.9		1.4		2.7	
....GENUS	1.8		2.3		1.9		1.4		2.7	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...MICRACTINIACEAE										
....GOLENKINIA	--	-	13^3	20	--	-	--	-	--	-
....MICRACTINIUM	--	-	--	-	43	6	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	41	5	--	-	--	-	--	-	--	-
....OOCYSTIS	--	-	--	-	--	-	64	10	--	-
....TETRAEDRON	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....SCENEDESMUS	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	29	4	26	4	51	11
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	41	5	--	-	--	-	--	-	26	5
....MELOSIRA	--	-	--	-	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	83	10	--	-	14	2	--	-	--	-
....COCCONEIS	--	-	--	-	--	-	--	-	--	-
....RHOICOSPHENIA	--	-	--	-	--	-	--	-	--	-
...CYMBELLACEAE										
....AMPHORA	--	-	--	-	--	-	--	-	77^3	16
....CYMBELLA	28	3	13^3	20	14	2	13	2	--	-
....EPITHEMIA	--	-	--	-	14	2	--	-	--	-
...DIATOMACEAE										
....DIATOMA	--	-	--	-	29	4	--	-	--	-
....OPEPHORA	--	-	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	29	4	--	-	--	-
....HANNAEA	14	2	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	--	-	460^3	72	13	3
...GOMPHONEMATACEAE										
....GOMPHONEMA	41	5	--	-	14	2	--	-	26	5
...NAVICULACEAE										
....NAVICULA	28	3	13^3	20	43	6	64	10	120^3	24
...NITZSCHIACEAE										
....NITZSCHIA	--	-	13^3	20	--	-	13	2	140^3	29
...SURIRELLACEAE										
....SURIRELLA	--	-	13^3	20	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....AGMENELLUM	--	-	--	-	--	-	--	-	--	-
....ANACYSTIS	--	-	--	-	--	-	--	-	13	3
..HORMOGONALES										
...OSCILLATORIACEAE										
....LYNGBYA	--	-	--	-	--	-	--	-	--	-
....OSCILLATORIA	520^3	66	--	-	470^3	67	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....EUGLENA	--	-	--	-	--	-	--	-	26	5

NOTE: ^{3} - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09177000 SAN MIGUEL RIVER AT URAVAN, CO

LOCATION.--Lat 38°21'26", long 108°42'44", in SW¼NE¼ sec.2, T.47 N., R.17 W., Montrose County, Hydrologic Unit 14030003, on right bank 20 ft (6 m) downstream from bridge on State Highway 141, 400 ft (120 m) downstream from Tabeguache Creek, and 1.5 mi (2.4 km) southeast of Uravan.

DRAINAGE AREA.--1,499 mi² (3,882 km²).

PERIOD OF RECORD.--August 1954 to September 1962, October 1973 to current year.

REVISED RECORDS.--WRD Colo. 1974: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,000 ft (1,524 m), from topographic map. Prior to Sept. 3, 1959, at site 0.5 mi (0.8 km) downstream at different datum.

REMARKS.--Records good except those for winter period, which are fair. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 28,000 acres (113 km²) above station, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--15 years (water years 1955-62, 1974-80), 337 ft³/s (9.544 m³/s), 244,200 acre-ft/yr (301 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,690 ft³/s (189 m³/s) Apr. 19, 1958, gage height, 11.75 ft (3.581 m), site and datum then in use; minimum daily, 9.4 ft³/s (0.27 m³/s) Aug. 10, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 12.6 ft (3.84 m), from floodmarks, discharge, 8,910 ft³/s (252 m³/s), by slope-area measurement at site 5.5 mi (8.8 km) downstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (57 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 23	0200	*3,220	91.2	7.80	2.377	May 2	0300	2,900	82.1	7.07	2.155

Minimum daily discharge, 36 ft³/s (1.02 m³/s) Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	95	73	60	74	59	84	2380	1700	1070	192	116
2	43	94	79	70	84	48	87	2110	1400	1100	185	110
3	37	106	74	60	106	50	95	1480	1300	1040	180	99
4	36	99	95	70	108	58	87	1570	1400	940	166	95
5	37	90	85	60	103	94	87	1810	1500	850	157	87
6	37	92	80	70	104	94	95	1780	1600	780	146	88
7	40	92	75	75	112	99	101	2070	1500	695	136	92
8	42	94	75	85	114	97	104	2160	1400	815	140	106
9	41	101	75	95	120	90	95	2060	1600	760	138	122
10	40	97	80	110	124	92	108	1570	1800	670	148	157
11	44	92	70	168	126	95	128	1650	2000	602	134	241
12	48	84	70	159	126	101	134	1830	2000	598	118	188
13	53	79	60	166	128	92	124	1560	2000	594	116	140
14	52	77	59	178	142	82	132	1600	1900	586	126	114
15	94	80	58	215	168	88	168	1410	1700	510	159	97
16	79	77	56	148	182	92	235	1400	1500	466	185	90
17	82	74	55	116	170	88	298	1630	1400	422	155	79
18	94	50	55	106	161	76	418	1460	1480	390	134	71
19	94	66	55	104	212	87	650	1400	1610	370	122	66
20	94	60	65	104	190	90	1110	1540	1540	348	112	59
21	132	71	70	99	170	88	1650	1670	1410	307	101	55
22	118	90	70	80	157	94	2060	2050	1290	274	66	53
23	101	74	85	71	150	101	2410	2280	1290	256	99	46
24	101	85	75	61	122	94	2180	2260	1290	241	161	42
25	110	101	70	87	103	99	1400	1700	1240	256	253	43
26	106	95	90	101	95	101	1420	1500	1260	283	241	44
27	104	92	100	110	103	88	1440	1400	1290	268	223	45
28	106	79	80	110	101	95	1520	1400	1220	218	166	43
29	95	67	70	106	90	92	1930	1500	1070	178	150	64
30	94	76	70	108	---	87	2400	1600	1010	198	134	79
31	94	---	65	92	---	88	---	1700	---	192	124	---
TOTAL	2250	2529	2239	3244	3745	2699	22750	53530	44700	16277	4667	2731
MEAN	72.6	84.3	72.2	105	129	87.1	758	1727	1490	525	151	91.0
MAX	132	106	100	215	212	101	2410	2380	2000	1100	253	241
MIN	36	50	55	60	74	48	84	1400	1010	178	66	42
AC-FT	4460	5020	4440	6430	7430	5350	45120	106200	88660	32290	9260	5420

CAL YR 1979 TOTAL 188979 MEAN 518 MAX 3790 MIN 36 AC-FT 374800
WTR YR 1980 TOTAL 161361 MEAN 441 MAX 2410 MIN 36 AC-FT 320100

09177100 SAN MIGUEL RIVER BELOW URAVAN, CO

LOCATION.--Lat 38°23'08", long 108°45'28", in SW¼NW¼ sec.28, T.48 N., R.17 W., Montrose County, Hydrologic Unit 14030003, at county bridge 75 ft (23 m) downstream from Atkinson Creek and 2.0 mi (3.2 km) northwest of Uravan.

DRAINAGE AREA.--1,549 mi² (4,012 km²).

PERIOD OF RECORD.--August 1969 to current year.

REMARKS.--Field data collected prior to 1974 water year are available in district office.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT												
01...	1615	24	2600	7.1	21.0	7.5	23	K9	990	860	200	120
29...	1340	64	1400	8.2	9.0	9.7	12	68	--	--	--	--
NOV												
27...	1050	64	1200	8.1	1.0	11.8	--	21	--	--	--	--
JAN												
08...	1235	51	1070	7.6	.0	12.0	12	24	410	280	100	38
FEB												
12...	1100	58	1040	7.9	1.0	11.8	7	78	--	--	--	--
MAR												
25...	1545	55	1450	8.0	9.0	9.7	12	K2	560	410	120	62
APR												
29...	0925	2150	270	7.5	9.0	9.9	63	K140	--	--	--	--
JUN												
03...	1245	1260	340	7.6	15.0	8.5	14	K19	--	--	--	--
JUL												
08...	1300	858	390	8.2	21.0	7.5	16	176	160	89	45	12
AUG												
05...	1110	155	680	8.3	21.0	7.4	11	--	--	--	--	--
SEP												
03...	1100	57	1210	8.1	18.0	7.8	5	100	--	--	--	--

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT												
01...	150	2.1	11	130	1000	160	2.6	1930	1720	2.6	126	3.8
29...	--	--	--	--	--	--	--	1020	--	1.3	178	1.1
NOV												
27...	--	--	--	--	--	--	--	923	--	1.2	161	.03
JAN												
08...	57	1.2	3.8	130	360	39	10	725	686	.99	99.8	.62
FEB												
12...	--	--	--	--	--	--	--	704	--	.96	111	.60
MAR												
25...	100	1.8	6.6	150	490	98	6.9	1030	974	1.4	155	.77
APR												
29...	--	--	--	--	--	--	--	194	--	.26	1130	.32
JUN												
03...	--	--	--	--	--	--	--	199	--	.27	677	.29
JUL												
08...	16	.5	1.5	73	100	9.2	7.3	257	235	.35	595	.11
AUG												
05...	--	--	--	--	--	--	--	574	--	.78	240	.46
SEP												
03...	--	--	--	--	--	--	--	873	--	1.1	134	.47

K BASED ON NON-IDEAL COLONY COUNT.

09177100 SAN MIGUEL RIVER BELOW URAVAN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	NICKEL, DISSOLVED (UG/L AS NI)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	CYANIDE DISSOLVED (MG/L AS CN)
OCT												
01...	17.0	--	--	--	.010	--	--	--	7.0	--	.01	--
29...	--	--	14.0	15	.000	10	0	10	--	5.6	--	.77
NOV												
27...	2.30	--	--	--	.030	9	0	30	--	--	--	--
JAN												
08...	3.30	.10	3.40	4.0	.040	9	0	7	--	7.4	--	.00
FEB												
12...	4.10	.50	4.60	5.2	.020	7	0	10	--	3.3	--	--
MAR												
25...	5.30	6.7	12.0	13	.020	9	0	10	--	5.9	--	.00
APR												
29...	.120	2.1	2.20	2.5	.410	6	0	50	--	11	--	--
JUN												
03...	.420	.42	.84	1.1	.020	3	0	0	--	7.5	--	.00
JUL												
08...	.630	.00	.63	.74	.110	3	0	10	--	5.2	--	--
AUG												
05...	1.40	.80	2.20	2.7	.010	3	0	20	--	4.9	--	--
SEP												
03...	1.70	.60	2.30	2.8	.130	5	0	40	--	6.2	--	1.0

09235300 VERMILLION CREEK NEAR HIAWATHA, CO

LOCATION.--Lat 41°00'54", long 108°38'39", in NE¼SE¼NE¼ sec.15, T.12 N., R.100 W., Sweetwater County, WY. Hydrologic Unit 14040109, on right bank 0.7 mi (1.1 km) upstream from county road, 0.9 mi (1.4 km) downstream from Alkali Creek, 1.8 mi (2.9 km) upstream from Horseshoe Wash, 1.9 mi (3.1 km) upstream from Colorado-Wyoming State line, 2.3 mi (3.7 km) northwest of Hiawatha, and 49 mi (79 km) southwest of Rock Springs, WY.

DRAINAGE AREA.--196 mi² (508 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,610 ft (2,015 m), from topographic map.

REMARKS.--Records poor. No diversion above station.

AVERAGE DISCHARGE.--5 years, 3.48 ft³/s (0.099 m³/s), 2,520 acre-ft/yr (3.11 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,160 ft³/s (32.9 m³/s) Sept. 7, 1978, gage height, 7.71 ft (2.350 m), from rating curve extended above 16 ft³/s (0.45 m³/s) on basis of slope-area measurements at gage heights of 3.03 ft (0.924 m), 6.52 ft (1.987 m) and 7.71 ft (2.350 m); no flow for many days during most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 847 ft³/s (24.0 m³/s) May 7, gage height, 6.97 ft (2.124 m); minimum daily, 0.31 ft³/s (0.009 m³/s) Jan. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.64	.86	.95	.55	.53	1.1	.95	16	26	4.0	2.1	1.9
2	.69	.90	1.1	.66	.64	1.0	1.0	15	21	4.8	3.0	1.8
3	.85	1.0	1.2	.74	.72	1.1	1.1	14	20	6.7	2.5	1.8
4	.85	1.2	1.3	.83	.67	1.0	1.3	19	22	5.3	2.2	1.8
5	.79	1.3	1.4	.87	.63	.90	1.6	32	24	5.3	2.5	1.7
6	.79	1.4	1.6	.80	.58	.80	1.8	24	22	4.8	2.7	1.7
7	.74	1.4	1.8	.69	.54	.68	1.7	153	19	4.2	2.5	1.7
8	.74	1.3	1.8	.71	.58	.58	1.8	37	15	3.8	2.2	1.6
9	.74	1.2	1.9	.73	.66	.70	2.1	11	14	3.2	2.0	1.4
10	.69	1.1	1.7	.69	.75	1.0	2.0	14	12	2.9	2.1	3.7
11	.69	1.1	1.4	.76	.80	2.0	3.5	13	11	3.1	2.0	2.7
12	.69	1.0	1.1	.84	.70	1.0	7.0	22	9.8	3.4	1.9	2.2
13	.74	1.0	.85	.93	.60	1.1	10	19	9.4	3.1	2.3	2.0
14	.74	1.1	.75	1.0	.61	1.4	20	14	9.0	2.6	3.0	1.7
15	.74	1.2	.65	1.0	.70	1.5	30	13	7.6	2.6	3.6	1.7
16	.74	1.3	.55	.90	.77	1.4	33	23	8.3	2.2	4.5	1.6
17	.79	1.2	.45	.80	.90	1.2	29	22	7.3	2.0	5.2	1.5
18	.91	1.2	.43	.70	1.5	1.1	38	18	5.9	2.0	4.5	1.5
19	.91	1.1	.43	.70	2.5	.94	114	17	5.9	2.0	3.5	1.6
20	1.3	1.1	.45	.80	3.5	1.0	163	17	6.2	2.0	3.7	1.8
21	1.2	.95	.45	.90	2.5	1.0	172	17	5.6	2.1	3.1	1.7
22	.95	.85	.42	.80	1.8	.95	113	23	5.6	2.1	2.4	1.6
23	1.1	.90	.38	.70	1.3	.95	61	29	5.0	2.1	2.2	1.6
24	1.2	.95	.36	.65	1.0	1.0	58	33	5.3	42	2.4	1.6
25	1.4	.90	.34	.60	1.2	1.1	27	29	5.9	6.0	2.8	1.5
26	1.2	.85	.33	.50	1.3	1.0	21	24	5.3	3.0	3.5	1.5
27	1.1	.80	.32	.40	1.4	.95	14	21	5.6	2.5	2.7	1.5
28	1.1	.75	.35	.35	1.3	1.1	11	21	5.0	2.1	2.2	1.6
29	1.0	.80	.38	.31	1.2	1.0	13	25	4.6	1.9	1.9	1.6
30	.95	.85	.43	.35	---	1.1	16	28	4.0	1.9	1.8	1.5
31	.90	---	.50	.42	---	1.0	---	26	---	2.0	1.8	---
TOTAL	27.87	31.56	26.07	21.68	31.88	32.65	968.85	789	327.3	137.7	84.8	53.1
MEAN	.90	1.05	.84	.70	1.10	1.05	32.3	25.5	10.9	4.44	2.74	1.77
MAX	1.4	1.4	1.9	1.0	3.5	2.0	172	153	26	42	5.2	3.7
MIN	.64	.75	.32	.31	.53	.58	.95	11	4.0	1.9	1.8	1.4
AC-FT	55	63	52	43	63	65	1920	1560	649	273	168	105

CAL YR 1979 TOTAL 1285.64 MEAN 3.52 MAX 196 MIN .00 AC-FT 2550
WTR YR 1980 TOTAL 2532.46 MEAN 6.92 MAX 172 MIN .31 AC-FT 5020

NOTE.--NO GAGE-HEIGHT RECORD JULY 25 TO SEPT. 2.

BEST DOCUMENT AVAILABLE

09235300 VERMILLION CREEK NEAR HIAWATHA, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (JTU)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT 23...	1745	--	1980	8.4	9.0	--	84	10.2	5.4	490	160
DEC 01...	1040	--	1850	7.9	.0	--	37	11.4	2.4	600	120
19...	1020	--	1950	8.2	.0	25	29	9.4	.8	610	98
JAN 08...	1045	--	1800	8.2	.0	35	37	10.3	.9	560	89
FEB 11...	1135	--	1690	8.4	.0	--	110	11.2	1.1	500	47
MAR 11...	1030	--	1400	8.8	.0	600	2300	10.6	3.5	510	240
APR 16...	1330	33	900	8.3	8.5	3800	3800	8.7	6.4	250	190
MAY 07...	1330	28	1300	8.2	8.0	4000	4400	8.4	4.6	730	390
JUN 06...	1150	19	950	8.2	14.0	550	5600	7.8	1.4	360	45
JUL 08...	1055	3.6	1300	8.3	19.5	200	110	6.8	1.4	420	85
AUG 06...	1550	2.6	1300	8.5	27.0	90	39	6.7	1.3	360	43
SEP 02...	1430	2.0	1400	8.4	22.5	60	96	7.0	1.8	420	110

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
OCT 23...	90	64	190	3.7	3.8	330	520	24	.3	11	1100
DEC 01...	110	80	240	4.3	4.7	480	620	30	.4	15	1390
19...	110	81	240	4.2	5.0	510	550	30	.3	16	1340
JAN 08...	100	75	220	4.1	3.6	470	500	28	.3	16	1230
FEB 11...	87	68	200	3.9	3.1	450	450	27	.2	16	1120
MAR 11...	110	57	160	3.1	5.0	270	480	18	.3	18	1010
APR 16...	54	27	87	2.4	3.4	100	310	9.5	.3	7.2	559
MAY 07...	160	80	250	4.0	5.8	380	870	30	.3	8.4	1630
JUN 06...	68	45	100	2.3	3.4	310	220	10	.2	15	649
JUL 08...	69	59	160	3.4	5.5	330	350	19	.4	19	882
AUG 06...	58	53	140	3.2	5.0	320	300	15	.4	14	778
SEP 02...	71	58	160	3.4	4.6	310	440	16	.3	13	950

09235300 VERMILLION CREEK NEAR HIAWATHA, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)
OCT										
23...	1.5	3.2	.12	.030	1.5	1.50	1.6	.690	140	20
DEC										
01...	1.8	3.5	.47	.090	3.6	3.70	4.2	.080	180	170
19...	1.8	1.5	.30	.050	.55	.60	.90	.040	480	30
JAN										
08...	1.6	2.3	.19	.110	.87	.98	1.2	.070	170	30
FEB										
11...	1.5	2.4	.22	.000	.51	.51	.73	.100	150	50
MAR										
11...	1.3	9.4	.23	.220	2.9	3.10	3.3	2.10	130	2900
APR										
16...	.76	49.8	.42	--	--	--	--	6.90	150	130
MAY										
07...	2.2	123	1.5	.120	20	20.0	22	4.70	190	50
JUN										
06...	.88	33.3	.06	.010	2.0	2.00	2.1	.910	140	460
JUL										
08...	1.2	8.5	.01	.000	.80	.80	.81	.240	180	1600
AUG										
06...	1.0	5.4	.00	.030	1.3	1.30	1.3	.310	170	110
SEP										
02...	1.2	9.1	.00	.000	1.0	1.00	1.0	.140	180	110

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
OCT										
23...	2500	30	7	1	0	< 1	1	< 1	10	0
DEC										
01...	--	--	--	--	--	--	--	--	--	--
JAN										
08...	1300	--	--	--	0	--	0	--	0	--
APR										
16...	22000	--	30	--	10	--	2	--	150	--
JUL										
08...	470	--	3	--	0	--	0	--	10	--

DATE	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)
OCT										
23...	32	8	24000	15	0	100	50	920	30	.1
DEC										
01...	--	--	--	--	--	--	--	--	--	--
JAN										
08...	4	--	1400	7	--	60	--	130	--	.0
APR										
16...	170	--	170000	140	--	220	--	6900	--	.2
JUL										
08...	6	--	6900	4	--	60	--	230	--	.1

09235300 VERMILLION CREEK NEAR HIAWATHA, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT										
23...	.0	4	11	25	0	1	1	< 1.0	80	< 3
DEC										
01...	--	--	--	--	--	--	--	--	--	--
JAN										
08...	--	6	--	4	--	1	--	--	--	--
APR										
16...	--	4	--	190	--	5	--	--	710	--
JUL										
08...	--	8	--	4	--	1	--	--	40	--

DATE	GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)
OCT										
23...	--	--	--	--	--	--	--	--	--	--
DEC										
01...	< 14	1.8	< 21	2.7	12	2.8	12	2.9	.09	12
JAN										
08...	--	--	--	--	--	--	--	--	--	--
APR										
16...	--	--	--	--	--	--	--	--	--	--
JUL										
08...	--	--	--	--	--	--	--	--	--	--

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO

LOCATION.--Lat 40°45'43", long 108°43'33", in SE¼SE¼ sec.3, T.9 N., R.101 W., Moffat County, Hydrologic Unit 14040109, on right bank 0.3 mi (0.5 km) downstream from unnamed tributary, 0.5 mi (0.8 km) upstream from inflow of Ink Springs, 800 ft (244 m) southwest of Ink Springs Ranch headquarters, and about 37 mi (60 km) northwest of Maybell.

DRAINAGE AREA.--816 mi² (2,113 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,725 ft (1,745 m), from topographic map.

REMARKS.--Records fair except those for period of no gage-height record, which are poor. Diversions above station for irrigation of hay meadows below station.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 616 ft³/s (17.4 m³/s) Sept. 15, 1978, gage height, 4.18 ft (1.274 m) from rating curve extended above 16 ft³/s (0.45 m³/s) on basis of slope-area measurement of peak flow; minimum daily, 1.1 ft³/s (0.031 m³/s) Aug. 29, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 420 ft³/s (11.9 m³/s) at 0400 May 8, gage height, 3.52 ft (1.073 m); minimum daily, 1.8 ft³/s (0.05 m³/s) Nov. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	3.2	2.0	2.6	4.0	20	18	63	38	7.0	2.2	2.5
2	3.5	3.0	2.5	2.6	4.2	20	16	52	36	8.4	2.2	2.5
3	3.8	3.2	2.5	2.4	4.2	20	14	47	32	9.6	2.2	2.5
4	3.5	4.0	3.0	2.4	4.2	25	24	48	29	10	2.2	2.5
5	3.5	5.4	3.0	2.6	4.5	25	41	69	29	8.0	2.2	2.5
6	3.5	6.3	3.0	2.6	4.5	20	40	66	29	6.6	2.2	2.5
7	3.5	5.6	3.0	2.4	4.2	20	40	132	27	5.4	2.2	2.5
8	3.5	5.4	3.0	2.6	4.5	20	40	232	26	4.9	2.2	10
9	3.5	5.6	2.5	2.6	4.2	20	40	90	26	5.0	2.2	20
10	3.5	4.0	2.5	2.8	4.2	20	40	79	25	5.0	2.2	40
11	3.5	3.2	2.5	2.4	4.5	20	35	89	23	4.5	2.2	20
12	3.5	3.0	2.0	2.8	5.4	20	35	129	19	4.0	2.2	5.3
13	3.5	2.6	2.0	2.8	6.0	20	37	100	18	4.0	2.2	3.0
14	3.2	2.6	2.0	86	14	22	39	93	18	4.0	2.2	2.5
15	2.4	2.6	2.0	48	100	25	40	66	17	4.0	80	2.5
16	2.4	2.6	2.0	28	90	24	45	62	16	3.6	60	2.5
17	2.4	2.4	2.0	12	96	23	50	170	15	3.5	10	2.5
18	2.4	3.5	2.0	6.3	190	23	55	124	14	3.0	8.0	2.5
19	2.4	4.0	2.0	17	80	46	68	120	14	2.8	5.0	2.5
20	4.1	2.6	2.3	4.0	50	40	114	118	13	2.8	3.0	4.0
21	31	2.3	2.3	5.0	40	63	137	126	12	2.6	2.5	2.5
22	16	2.0	2.3	4.8	35	76	124	79	11	2.8	2.3	2.5
23	20	1.8	2.3	4.0	35	71	91	66	10	2.4	2.3	2.5
24	27	2.5	2.2	3.8	30	60	86	66	9.0	2.3	3.0	2.5
25	62	3.5	2.3	3.8	30	55	66	54	8.0	2.3	40	2.5
26	54	3.5	2.3	3.5	28	37	53	47	7.0	2.2	20	2.5
27	22	3.0	2.3	3.5	25	31	45	41	6.5	2.2	8.0	2.5
28	18	3.0	2.3	3.5	25	26	39	37	6.3	2.2	5.0	2.5
29	10	2.6	2.3	3.5	25	21	37	35	6.0	2.2	2.5	2.5
30	5.4	2.0	2.3	3.2	---	20	50	39	6.0	2.2	2.5	2.5
31	3.8	---	2.4	4.2	---	17	---	39	---	2.2	2.5	---
TOTAL	334.3	101.0	73.1	278.5	927.6	950	1559	2578	545.8	131.6	285.4	159.8
MEAN	10.8	3.37	2.36	8.98	32.0	30.6	52.0	83.2	18.2	4.25	9.21	5.33
MAX	62	6.3	3.0	86	190	76	137	232	38	10	80	40
MIN	2.4	1.8	2.0	2.4	4.0	17	14	35	6.0	2.2	2.2	2.5
AC-FT	663	200	145	552	1840	1880	3090	5110	1080	261	566	317

CAL YR 1979 TOTAL 4130.2 MEAN 11.3 MAX 103 MIN 1.3 AC-FT 8190
WTR YR 1980 TOTAL 7924.1 MEAN 21.7 MAX 232 MIN 1.8 AC-FT 15720

NOTE.--NO GAGE-HEIGHT RECORD JULY 27 TO SEPT. 30.

BEST DOCUMENT AVAILABLE

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT										
15...	1200	2.3	1000	7.5	12.5	--	9.1	0	K140	310
NOV										
19...	1400	4.0	1970	8.5	8.0	--	9.9	17	K10	390
JAN										
03...	1200	2.4	955	8.4	10.5	--	9.6	10	< 4	K32
FEB										
12...	1000	5.8	1500	8.1	9.0	--	10.6	12	< 4	K44
APR										
01...	1315	18	1410	7.9	4.0	--	9.9	96	<20	620
MAY										
21...	1300	134	1210	8.0	10.0	2900	7.2	75	400	K800
JUL										
03...	1200	9.0	1620	8.0	22.0	--	7.1	90	2300	1900
AUG										
26...	1200	28	2920	7.7	15.0	--	8.2	2100	K1600	>3600

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT										
15...	290	98	71	27	95	2.4	7.6	190	120	150
NOV										
19...	940	300	130	52	140	2.6	7.8	240	470	100
JAN										
03...	290	120	68	28	96	2.5	7.0	170	120	150
FEB										
12...	530	290	130	50	150	2.8	6.3	240	460	92
APR										
01...	410	210	110	34	140	3.0	4.6	200	450	49
MAY										
21...	380	220	110	26	120	2.7	3.9	160	440	19
JUL										
03...	560	340	120	62	180	3.3	7.1	220	640	54
AUG										
26...	1300	1100	390	96	310	3.8	10	130	1600	59

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)
OCT									
15...	.4	13	596	590	.81	3.7	.08	.000	.43
NOV									
19...	.3	16	1010	1060	1.3	10.9	.24	.060	.44
JAN									
03...	.3	12	587	584	.80	3.8	.16	.020	.57
FEB									
12...	.3	16	1030	1050	1.4	16.1	.17	.030	.48
APR									
01...	.3	11	1030	919	1.4	50.1	.23	.090	3.4
MAY									
21...	.3	11	857	827	1.1	310	.23	.090	9.9
JUL									
03...	.6	--	1170	1190	1.5	28.4	.22	.020	3.9
AUG									
26...	.4	4.4	2620	2510	3.5	198	5.7	.170	93

K BASED ON NON-IDEAL COLONY COUNT.

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)
OCT 19...	.43	.51	.140	.000	150	20	3.4	--	320
NOV 19...	.90	.74	.070	.010	180	10	3.8	.2	190
JAN 03...	.99	.75	.010	.000	150	50	3.8	.1	950
FEB 12...	.51	.68	.040	.000	140	60	9.9	.6	--
APR 01...	3.90	3.7	1.90	.070	6	30	11	--	0
MAY 21...	10.0	10	6.20	.040	110	30	8.8	--	330
JUL 03...	3.90	4.1	1.20	.000	210	50	7.8	8.5	790
AUG 26...	93.0	90	18.0	.000	240	40	15	--	--

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BERYL-LIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
JAN 03...	1200	0	--	1	--	--	50	--	--	< 1	--
MAY 21...	1300	20	35	2	10	1900	0	160	10	0	1
AUG 26...	1200	40	--	2	--	--	200	--	--	0	--

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)
JAN 03...	--	< 1	--	--	0	--	--	< 3	--	0	--
MAY 21...	3	1	2	110	0	2	54	0	30	2	8
AUG 26...	--	4	--	--	0	--	--	2	--	7	--

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)
JAN 03...	--	0	--	--	130	--	30	--	--	.0	--
MAY 21...	140	3	20	180	30	4200	0	670	.3	.0	.0
AUG 26...	--	2	--	--	40	--	20	--	--	.1	--

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	MOLYB-DENUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
JAN											
03...	--	15	--	--	3	--	--	1	--	2.0	--
MAY											
21...	4	6	7	180	0	40	8	1	1	.0	660
AUG											
26...	--	13	--	--	5	--	--	6	--	1.0	--

DATE	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
JAN										
03...	< 3	--	--	--	--	--	--	--	--	--
MAY										
21...	10	15	< 9.5	180	< 14	260	7.0	150	6.7	140
AUG										
26...	10	--	--	--	--	--	--	--	--	--

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
15...	1033	2.3	35	.22
JUL				
03...	1200	9.0	2000	49

BEST DOCUMENT AVAILABLE

09235450 VERMILLION CREEK AT INK SPRINGS RANCH, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO JULY 1980

DATE	OCT 15,79	NOV 19,79	JAN 3,80	APR 1,80	MAY 21,80	JUL 3,80
TIME	1200	1400	1200	1315	1300	1200
TOTAL CELLS/ML	320	190	550	0	330	790
DIVERSITY: DIVISION	0.4	0.0	0.8	0.0	0.0	0.4
.CLASS	0.4	0.0	0.8	0.0	0.0	0.4
..ORDER	0.9	0.0	1.0	0.0	0.0	0.4
...FAMILY	2.0	2.5	2.9	0.0	0.0	1.3
....GENUS	2.0	2.5	2.9	0.0	0.0	1.3

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...OOCYSTACEAE												
....ANKISTRODESMUS	13	4	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	13	4	--	-	--	-	--	-	--	-	72	9
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	26	8	--	-	5	1	--	-	--	-	--	-
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	13	4	25	13	140³	25	--	-	--	-	--	-
...CYMBELLACEAE												
....CYMBELLA	--	-	--	-	15	3	--	-	--	-	--	-
...DIATOMACEAE												
....OPEPHORA	--	-	30³	16	--	-	--	-	--	-	--	-
...FRAGILARIACEAE												
....SYNEDRA	13	4	15	8	40	7	--	-	--	-	--	-
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	25	13	71	13	--	-	--	-	--	-
...NAVICULACEAE												
....NAVICULA	78³	24	40³	21	66	12	--	-	--	-	72	9
...NITZSCHIACEAE												
....NITZSCHIA	170³	52	56³	29	86³	16	--	-	--	-	570³	73
...SURIRELLACEAE												
....SURIRELLA	--	-	--	-	5	1	--	-	--	-	72	9
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	--	-	40	7	--	-	--	-	--	-
..HORMOGONALES												
...OSCILLATORIACEAE												
....LYNGBYA	--	-	--	-	--	-	--	-	330³	100	--	-
....SCHIZOTHRIX	--	-	--	-	81	15	--	-	--	-	--	-

NOTE: ³ - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

BEST DOCUMENT AVAILABLE

09235800 POT CREEK NEAR VERNAL, UT

LOCATION.--Lat 40°40'25", long 109°03'03", in SW¼NE¼SE¼ sec.1, T.2 S., R.25 E., Daggett County, UT, Hydrologic Unit 14040106, on left bank 0.2 mi (0.3 km) upstream from Colorado-Utah State line, 7 mi (11 km) upstream from mouth, and 29 mi (47 km) northeast of Vernal.

DRAINAGE AREA.--107 mi² (277 km²).

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,900 ft (2,103 m), from topographic map.

REMARKS.--Records good. Flow regulated by Matt Warner and Crouse Reservoirs, 14 mi (23 km) and 7 mi (11 km) upstream, respectively, combined capacity, about 4,000 acre-ft (4.93 hm³). Several diversions for irrigation above station, including one to Crouse Creek basin for irrigation of about 100 acres (405,000 m²) in Browns Park.

AVERAGE DISCHARGE.--23 years, 1.91 ft³/s (0.054 m³/s), 1,380 acre-ft/yr (1.70 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 286 ft³/s (8.10 m³/s) Apr. 7, 1962, gage height, 3.85 ft (1.173 m), from rating curve extended above 170 ft³/s (4.81 m³/s); maximum gage height, 3.99 ft (1.216 m) Mar. 15, 1966 (backwater from ice); no flow for part of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 133 ft³/s (3.77 m³/s) May 12, gage height, 2.65 ft (0.716 m); no flow most of the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.01	.05	.12	86	8.3	.00	.00	.48
2	.00	.00	.00	.00	.01	.04	.11	110	7.3	.00	.00	.48
3	.00	.00	.00	.00	.01	.04	.08	84	5.3	.00	.00	.86
4	.00	.00	.00	.00	.00	.05	.14	54	4.1	.00	.00	1.6
5	.00	.00	.00	.00	.00	.03	.43	37	2.8	.00	.00	1.7
6	.00	.00	.00	.00	.00	.05	.59	29	1.9	.00	.00	1.7
7	.00	.00	.00	.00	.00	.06	1.0	26	1.4	.00	.00	1.9
8	.00	.00	.00	.00	.00	.06	2.3	21	1.2	.00	.00	2.3
9	.00	.00	.00	.00	.00	.08	2.3	26	1.4	.00	.00	2.4
10	.00	.00	.00	.00	.00	.11	2.8	55	1.0	.00	.00	2.8
11	.00	.00	.00	.00	.00	.11	1.7	107	.71	.00	.00	2.4
12	.00	.00	.00	.00	.00	.11	1.1	121	.48	.00	.00	2.0
13	.00	.00	.00	.00	.00	.10	1.2	120	.34	.00	.00	1.2
14	.00	.00	.00	.38	.00	.18	2.5	96	.23	.00	.00	.20
15	.00	.00	.00	.18	.03	.18	6.9	67	.16	.00	.00	.03
16	.00	.00	.00	.08	.09	.14	7.3	52	.14	.00	.00	.01
17	.00	.00	.00	.06	.05	.14	8.3	52	.12	.00	.00	.01
18	.00	.00	.00	.06	.16	.16	13	41	.08	.00	.00	.00
19	.00	.00	.00	.05	.14	.20	15	35	.06	.00	.00	.00
20	.16	.00	.00	.07	.28	.26	17	29	.04	.00	.00	.00
21	.04	.00	.00	.05	.14	.26	21	25	.03	.00	.00	.00
22	.00	.00	.00	.04	.11	.23	17	21	.01	.00	.00	.00
23	.00	.00	.00	.03	.08	.20	13	19	.00	.00	.00	.00
24	.00	.00	.00	.03	.07	.23	16	16	.00	.00	.00	.00
25	.00	.00	.00	.02	.04	.23	13	14	.00	.00	.00	.00
26	.00	.00	.00	.02	.02	.18	13	13	.00	.00	.00	.00
27	.00	.00	.00	.02	.07	.14	11	13	.00	.00	.28	.00
28	.00	.00	.00	.02	.12	.11	5.5	12	.00	.00	1.9	.00
29	.00	.00	.00	.02	.08	.11	3.8	11	.00	.00	2.3	.00
30	.00	.00	.00	.01	---	.12	12	10	.00	.00	2.7	.00
31	.00	---	.00	.01	---	.12	---	9.4	---	.00	1.8	---
TOTAL	.20	.00	.00	1.15	1.51	4.08	209.17	1411.4	37.10	.00	8.98	22.07
MEAN	.006	.000	.000	.037	.052	.13	6.97	45.5	1.24	.000	.29	.74
MAX	.16	.00	.00	.38	.28	.26	21	121	8.3	.00	2.7	2.8
MIN	.00	.00	.00	.00	.00	.03	.08	9.4	.00	.00	.00	.00
AC-FT	.4	.00	.00	2.3	3.0	8.1	415	2800	74	.00	18	44

CAL YR 1979 TOTAL 173.05 MEAN .47 MAX 7.6 MIN .00 AC-FT 343
WTR YR 1980 TOTAL 1695.66 MEAN 4.63 MAX 121 MIN .00 AC-FT 3360

09236000 BEAR RIVER NEAR TOPONAS, CO

LOCATION.--Lat 40°03'00", long 107°04'00", in NW¼ sec.20, T.1 N., R.86 W., Garfield County, Hydrologic Unit 14050001, on right bank just downstream from Yampa Reservoir Dam at Stillwater campground, 0.8 mi (1.3 km) downstream from Mandall Creek, 0.8 mi (1.3 km) upstream from Dome Creek, and 14 mi (23 km) west of Toponas.

DRAINAGE AREA.--23 mi² (60 km²), approximately.

PERIOD OF RECORD.--October 1952 to September 1965, October 1966 to current year. Published as Yampa River near Toponas prior to October 1973.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 9,700 ft (2,957 m), from river-profile map. Oct. 28, 1952, to Sept. 30, 1965, water-stage recorder at site 50 ft (15 m) upstream at different datum.

REMARKS.--Records fair. Flow regulated by Stillwater Reservoir, capacity, 6,200 acre-ft (7.64 hm³) 3.5 mi (5.6 km) upstream and Yampa Reservoir, capacity, 620 acre-ft (764,000 m³). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years, 39.7 ft³/s (1.124 m³/s), 28,760 acre-ft/yr (35.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 436 ft³/s (12.3 m³/s) July 2, 1957, gage height, 6.39 ft (1.948 m), site and datum then in use; minimum daily, 1.6 ft³/s (0.045 m³/s) Oct. 6-24, Nov. 18 to Dec. 8, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 239 ft³/s (6.77 m³/s) at 2000 June 11, gage height, 2.77 ft (0.844 m); minimum daily, 13 ft³/s (0.37 m³/s) Mar. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	16	16	14	16	17	14	19	68	127	80	30
2	19	17	15	15	15	16	14	17	69	127	78	29
3	19	17	16	15	15	16	14	17	74	124	76	29
4	22	17	16	15	15	16	14	18	86	125	70	29
5	35	17	15	15	15	15	14	19	94	121	59	30
6	37	16	16	15	15	15	14	23	101	120	43	30
7	24	17	16	15	16	16	15	27	104	124	34	30
8	22	17	15	15	16	16	14	27	105	124	33	31
9	19	17	15	15	16	15	14	29	115	122	33	32
10	18	17	15	15	16	14	14	27	153	121	31	30
11	18	17	15	15	15	14	14	27	223	120	30	31
12	18	17	15	15	15	14	14	26	137	124	30	38
13	18	16	15	17	15	14	14	23	132	131	30	39
14	18	16	15	17	15	14	14	22	129	128	32	39
15	18	16	15	19	16	14	14	23	125	125	36	39
16	19	16	15	17	16	14	15	24	123	129	35	38
17	19	16	15	15	16	14	15	24	125	132	35	35
18	18	17	15	15	16	14	15	22	131	140	36	35
19	18	17	14	15	17	14	15	27	137	140	34	35
20	18	18	14	15	17	14	16	35	133	142	35	37
21	19	17	14	15	16	14	17	45	129	149	34	35
22	18	16	14	15	17	14	19	59	128	146	32	33
23	18	16	14	15	17	14	18	68	127	136	31	28
24	18	16	14	15	17	14	17	65	128	123	34	27
25	18	16	15	15	16	14	16	57	129	123	33	27
26	18	17	14	15	16	14	16	54	133	120	32	27
27	18	17	15	15	16	14	17	57	139	117	31	27
28	18	17	15	15	15	13	19	64	137	112	31	27
29	18	16	15	15	17	13	20	65	136	109	30	27
30	18	16	15	16	---	14	21	64	132	105	29	27
31	17	---	14	16	---	14	---	68	---	95	30	---
TOTAL	616	498	462	476	460	448	467	1142	3682	3881	1217	951
MEAN	19.9	16.6	14.9	15.4	15.9	14.5	15.6	36.8	123	125	39.3	31.7
MAX	37	18	16	19	17	17	21	68	223	149	80	39
MIN	17	16	14	14	15	13	14	17	68	95	29	27
AC-FT	1220	988	916	944	912	889	926	2270	7300	7700	2410	1890

CAL YR 1979 TOTAL 14981 MEAN 41.0 MAX 203 MIN 14 AC-FT 29710
WTR YR 1980 TOTAL 14300 MEAN 39.1 MAX 223 MIN 13 AC-FT 28360

09239500 YAMPA RIVER AT STEAMBOAT SPRINGS, CO

LOCATION.--Lat 40°29'01", long 106°49'54", in NW¼NE¼ sec.17, T.6 N., R.84 W., Routt County, Hydrologic Unit 14050001, on right bank 30 ft (9 m) downstream from Fifth Street Bridge in Steamboat Springs and 0.6 mi (1.0 km) upstream from Soda Creek.

DRAINAGE AREA.--604 mi^2 (1,564 km^2).

PERIOD OF RECORD.--May 1904 to October 1906, October 1909 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 764: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,695.47 ft (2,040.779 m), National Geodetic Vertical Datum of 1929. Prior to May 8, 1905, nonrecording gage at bridge 0.2 mi (0.3 km) upstream at datum 4.16 ft (1.268 m) higher. May 8, 1905, to Oct. 31, 1906, nonrecording gage on bridge 30 ft (9 m) upstream at datum 0.44 ft (0.134 m) higher. Mar. 8, 1910, to Sept. 11, 1934, water-stage recorder at present site at datum 0.44 ft (0.134 m) higher.

REMARKS.--Records good. Natural flow of stream affected by two diversions for irrigation to Egeria Creek in Colorado River basin, one diversion for irrigation from Trout Creek drainage to Oak Creek drainage, irrigation of about 19,700 acres (79.7 km^2) above station, and by storage reservoirs. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--73 years, 466 ft^3/s (13.20 m^3/s), 337,600 acre-ft/yr (416 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,820 ft^3/s (193 m^3/s) June 14, 1921, gage height, 7.08 ft (2.158 m), present datum, from rating curve extended above 4,800 ft^3/s (140 m^3/s); minimum daily, 4.0 ft^3/s (0.11 m^3/s) Sept. 8, 1934, Sept. 10-13, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft^3/s (85 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
May 24	0100	3,180	90.1	5.09	1.551	June 6	2300	*3,300	93.5	5.12	1.561

Minimum daily discharge, 58 ft^3/s (1.64 m^3/s) Oct. 3, 4, 6, 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	82	76	74	66	95	98	1600	2280	736	163	93
2	59	84	71	80	74	93	97	1280	2360	1040	159	95
3	58	89	81	82	81	95	99	1280	2500	911	159	90
4	58	93	87	81	88	91	102	1380	2720	686	157	85
5	59	100	97	79	88	100	109	1420	2950	522	154	83
6	58	98	98	78	85	98	115	1500	3080	426	159	80
7	58	96	94	76	86	96	117	1830	3030	389	161	77
8	59	98	97	71	87	95	116	2170	2920	457	163	76
9	60	98	90	77	80	95	116	2020	2940	375	154	83
10	61	96	85	77	80	95	134	1890	2960	317	137	90
11	62	94	88	72	83	93	134	1950	2900	278	125	96
12	64	94	89	76	87	90	128	2140	2740	257	114	105
13	64	84	69	80	87	87	132	1750	2550	283	114	101
14	67	81	74	85	89	91	145	1430	2300	305	112	88
15	69	81	84	94	97	91	174	1350	2050	280	133	79
16	76	78	93	92	99	93	226	1400	1820	220	170	77
17	80	81	91	91	96	95	273	1620	1720	188	168	73
18	85	88	89	86	95	91	351	1530	1610	171	154	70
19	87	95	90	86	103	91	471	1360	1530	161	129	67
20	101	90	90	85	98	95	676	1490	1550	151	116	74
21	123	82	93	80	99	100	932	2000	1470	144	112	83
22	112	78	93	77	99	103	1310	2340	1360	141	112	83
23	103	75	98	77	98	101	1680	2830	1270	134	107	80
24	107	70	90	71	96	110	1820	3140	1170	137	112	78
25	108	84	81	74	91	105	1640	2810	1110	137	116	76
26	106	80	78	83	80	105	1670	2350	1050	150	116	75
27	103	85	78	86	77	101	1610	2190	973	144	112	73
28	98	86	81	85	87	96	1620	2280	842	137	108	72
29	101	82	80	90	93	98	1640	2400	711	137	101	73
30	99	79	77	84	---	99	1840	2130	660	144	95	72
31	89	---	69	73	---	101	---	2290	---	159	93	---
TOTAL	2493	2601	2651	2502	2569	2989	19575	59180	59126	9717	4085	2447
MEAN	80.4	86.7	85.5	80.7	88.6	96.4	653	1909	1971	313	132	81.6
MAX	123	100	98	94	103	110	1840	3140	3080	1040	170	105
MIN	58	70	69	71	66	87	97	1280	660	134	93	67
AC-FT	4940	5160	5260	4960	5100	5930	38830	117400	117300	19270	8100	4850

CAL YR 1979 TOTAL 171001 MEAN 468 MAX 3990 MIN 57 AC-FT 339200
WTR YR 1980 TOTAL 169935 MEAN 464 MAX 3140 MIN 58 AC-FT 337100

09241000 ELK RIVER AT CLARK, CO

LOCATION.--Lat 40°43'03", long 106°54'55", in NW¼NW¼ sec.27, T.9 N., R.85 W., Routt County, Hydrologic Unit 14050001, on left bank 30 ft (9 m) downstream from bridge on State Highway 129, 0.8 mi (1.3 km) north of Clark, and 2.0 mi (3.2 km) upstream from Cottonwood Gulch.

DRAINAGE AREA.--206 mi^2 (534 km^2).

PERIOD OF RECORD.--May 1910 to September 1922 (published as "near Clark"), April 1930 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1733: 1956.

GAGE.--Water-stage recorder. Datum of gage is 7,267.75 ft (2,215.210 m) (State Highway Department bench mark). May 1910 to September 1922, nonrecording gage at site 30 ft (9 m) upstream at datum 0.15 ft (0.046 m) lower. Apr. 23, 1930, to Sept. 27, 1934, water-stage recorder at present site at datum 0.15 ft (0.046 m) lower.

REMARKS.--Records fair except those for winter period, which are poor. Diversions above station for irrigation of about 230 acres (931,000 m^2) above and about 460 acres (1.86 km^2) below station. Natural flow of stream affected by storage in Lester Creek Reservoir (known also as Pearl Lake), capacity, 5,660 acre-ft (6.98 hm^3) since 1963 and Steamboat Lake, capacity, 23,060 acre-ft (28.4 hm^3) since 1968. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--62 years, 335 ft^3/s (9.487 m^3/s), 242,700 acre-ft/yr (299 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,470 ft^3/s (127 m^3/s) June 6, 9, 1912; minimum daily determined, 22 ft^3/s (0.62 m^3/s) Dec. 12, 1963, but a lesser discharge may have occurred during periods of no gage-height record prior to 1939.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft^3/s (54 m^3/s) and maximum (*):

Date	Time	Discharge		Gage height		Date	Time	Discharge		Gage height	
		(ft^3/s)	(m^3/s)	(ft)	(m)			(ft^3/s)	(m^3/s)	(ft)	(m)
May 23	2100	2,500	70.8	4.60	1.402	June 11	2200	*3,090	87.5	4.96	1.512

Minimum daily discharge, 47 ft^3/s (1.33 m^3/s) Jan. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	52	50	48	48	48	48	863	1570	1310	133	70
2	55	66	50	48	48	48	48	857	1590	1440	131	69
3	55	71	50	48	48	48	48	955	1660	1170	124	65
4	54	79	50	48	48	48	48	1020	1900	1100	117	61
5	54	80	50	48	48	48	48	1090	2120	955	110	59
6	54	75	50	48	48	48	48	1210	2230	845	105	58
7	53	78	50	48	48	48	48	1260	2220	822	100	58
8	52	77	50	48	48	48	48	1370	2170	978	96	59
9	51	73	50	48	48	48	48	1440	2260	773	93	70
10	51	68	50	48	48	48	48	1480	2440	702	90	71
11	51	64	50	48	48	48	48	1620	2580	641	87	75
12	51	62	50	48	48	48	48	1430	2560	577	82	80
13	51	60	50	48	48	48	48	1130	2340	524	79	116
14	51	58	50	48	48	48	48	1070	2170	475	79	95
15	50	56	50	48	48	48	48	1110	1970	417	104	76
16	53	56	49	48	48	48	48	1200	1770	386	136	68
17	59	56	49	48	48	48	48	1220	1730	368	113	64
18	61	54	49	48	48	48	50	1110	1680	348	93	60
19	63	54	49	48	48	48	54	1260	1640	323	84	58
20	67	54	49	48	48	48	62	1340	1580	300	83	61
21	74	52	49	48	48	48	70	1510	1630	273	83	70
22	74	52	49	48	48	48	80	1820	1630	245	76	68
23	68	52	49	47	48	48	100	2060	1620	224	71	63
24	68	52	49	48	48	48	110	1950	1600	199	83	60
25	70	52	49	48	48	48	130	1600	1550	181	87	58
26	72	50	49	48	48	48	160	1440	1560	170	108	57
27	73	50	49	48	48	48	170	1580	1530	169	108	56
28	69	50	49	48	48	48	340	1720	1320	160	92	55
29	67	50	49	48	48	48	508	1720	1220	140	81	54
30	62	50	49	48	---	48	747	1550	1270	140	72	59
31	53	---	49	48	---	48	---	1600	---	145	70	---
TOTAL	1843	1803	1534	1487	1392	1488	3397	42585	55110	16500	2970	1993
MEAN	59.5	60.1	49.5	48.0	48.0	48.0	113	1374	1837	532	95.8	66.4
MAX	74	80	50	48	48	48	747	2060	2580	1440	136	116
MIN	50	50	49	47	48	48	48	857	1220	140	70	54
AC-FT	3660	3580	3040	2950	2760	2950	6740	84470	109300	32730	5890	3950

CAL YR 1979 TOTAL 126133 MEAN 346 MAX 2650 MIN 29 AC-FT 250200
WTR YR 1980 TOTAL 132102 MEAN 361 MAX 2580 MIN 47 AC-FT 262000

NOTE.--NO GAGE-HEIGHT RECORD MAR. 12 TO APR. 28.

09243700 MIDDLE CREEK NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'08", long 106°59'33", in SW¼SW¼ sec.13, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on left bank 1.1 mi (1.77 km) above mouth of Foidel Creek and 13.5 mi (21.7 km) northwest of Oak Creek.

DRAINAGE AREA.--23.5 mi² (60.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,720 ft (2.050 m), National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are poor.

AVERAGE DISCHARGE.--5 years, 3.51 m³/s (0.099 m³/s), 2,540 acre-ft/yr (3.13 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 172 ft³/s (4.87 m³/s) May 11, 1980, gage height, 3.21 ft (0.978 m) from rating curve extended above 45 ft³/s (1.27 m³/s); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 172 ft³/s (4.87 m³/s) May 11, gage height, 3.21 ft (0.978 m) from rating curve extended above 45 ft³/s (1.27 m³/s), only peak above base of 15 ft³/s (0.42 m³/s); no flow Oct. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.41	.46	.55	.70	.85	1.3	55	14	6.8	.49	.02
2	.00	.38	.46	.55	.70	.85	1.3	48	14	5.4	.37	.02
3	1.1	.42	.46	.55	.70	.85	1.4	48	10	3.1	.22	.02
4	1.5	.41	.46	.55	.70	.85	1.4	52	10	2.2	.12	.02
5	1.3	.45	.46	.55	.70	.85	1.5	54	10	2.0	.06	.02
6	.83	.48	.47	.55	.70	.85	1.5	64	9.0	1.7	.04	.02
7	.40	.47	.47	.55	.70	.85	1.5	92	8.8	1.8	.03	.02
8	.13	.49	.47	.55	.70	.90	1.6	98	8.6	2.1	.02	.02
9	.08	.49	.47	.55	.70	.90	1.6	89	7.6	1.8	.01	.02
10	.05	.58	.47	.55	.70	.90	1.7	92	7.3	1.6	.01	.17
11	.03	.57	.47	.60	.75	.90	1.7	116	6.6	1.6	.01	.24
12	.02	.54	.47	.60	.75	.90	1.8	115	6.0	1.8	.01	.16
13	.02	.49	.48	.60	.75	.90	1.8	91	5.9	1.9	.33	.15
14	.02	.54	.48	.60	.75	.90	1.7	75	5.5	1.8	.26	.10
15	.01	.56	.48	.60	.75	.95	1.5	67	5.2	1.4	.10	.05
16	.01	.54	.48	.60	.75	.95	2.1	65	5.2	1.2	.04	.03
17	.01	.48	.48	.60	.75	.95	11	82	4.9	1.1	.45	.03
18	.01	.44	.50	.60	.75	.95	7.4	69	4.9	1.1	.41	.03
19	.01	.45	.50	.60	.75	.95	12	59	3.8	1.3	.33	.03
20	.01	.45	.50	.60	.75	.95	17	54	4.0	1.1	.17	.03
21	.33	.45	.50	.65	.80	.95	30	49	3.8	.96	.06	.03
22	.52	.45	.50	.65	.80	.98	33	46	3.5	.95	.03	.03
23	.49	.45	.50	.65	.80	.98	41	41	3.2	.87	.02	.03
24	.57	.45	.50	.65	.80	.98	37	37	2.8	.98	.02	.03
25	.51	.45	.50	.65	.80	.98	34	31	2.7	.84	.02	.03
26	.45	.45	.50	.65	.80	1.0	40	28	2.4	.59	.33	.03
27	.43	.45	.50	.65	.80	1.1	41	25	2.1	.69	.33	.03
28	.39	.46	.50	.65	.80	1.1	43	21	1.9	.53	.26	.03
29	.41	.46	.50	.65	.80	1.2	46	19	1.8	.41	.10	.03
30	.49	.46	.50	.65	---	1.2	64	18	2.1	.37	.02	.03
31	.48	---	.50	.65	---	1.2	---	16	---	.56	.02	---
TOTAL	10.61	14.17	14.99	18.65	21.70	29.62	481.8	1816	177.6	50.55	4.69	1.50
MEAN	.34	.47	.48	.60	.75	.96	16.1	58.6	5.92	1.63	.15	.050
MAX	1.5	.58	.50	.65	.80	1.2	64	116	14	6.8	.49	.24
MIN	.00	.38	.46	.55	.70	.85	1.3	16	1.8	.37	.01	.02
AC-FT	21	28	30	37	43	59	956	3600	352	100	9.3	3.0

CAL YR 1979 TOTAL 1542.26 MEAN 4.23 MAX 47 MIN .00 AC-FT 3060
WTR YR 1980 TOTAL 2641.88 MEAN 7.22 MAX 116 MIN .00 AC-FT 5240

NOTE.--NO GAGE-HEIGHT RECORD DEC. 12 TO MAR. 24.

09243700 MIDDLE CREEK NEAR OAK CREEK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1976 to current year.
WATER TEMPERATURES: April 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1976.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 940 micromhos Sept. 11, 1980; minimum, 117 micromhos Aug. 10, 1978.
WATER TEMPERATURES: Maximum, 31.5°C July 31, 1976; minimum, freezing point on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 940 micromhos Sept. 11; minimum, 297 micromhos May 2.
WATER TEMPERATURES: Maximum, 24.5°C June 21, Sept. 5; minimum not determined.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC										
10...	1200	.47	761	8.3	2.0	--	350	59	82	35
MAR										
25...	1155	.98	655	7.9	1.5	--	280	36	66	27
APR										
15...	1030	2.2	600	7.7	1.5	--	270	69	65	26
21...	1915	46	400	7.2	4.0	--	--	--	--	--
22...	1830	47	430	7.5	8.5	--	190	79	46	18
29...	1530	42	380	--	13.0	--	--	--	--	--
MAY										
20...	1255	48	380	7.7	14.0	--	--	--	--	--
28...	1100	20	460	8.0	11.0	8.7	230	57	53	23
JUN										
24...	1125	2.5	650	8.1	17.0	7.7	290	75	68	28
JUL										
29...	1025	.04	735	7.9	16.0	8.8	350	86	79	36
AUG										
27...	1110	.01	750	8.0	15.0	8.8	330	77	75	34

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	AD-SORP-TION RATIO	SIUM, DIS-SOLVED (MG/L AS K)	LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	RIDE, DIS-SOLVED (MG/L AS CL)	RIDE, DIS-SOLVED (MG/L AS F)	DIS-SOLVED (MG/L AS SIO2)	CONSTI-TUENTS, DIS-SOLVED (MG/L)
DEC									
10...	44	1.0	4.0	290	130	5.0	.2	10	485
MAR									
25...	35	.9	2.4	240	120	4.3	.0	8.8	409
APR									
15...	30	.8	3.0	200	120	3.9	.2	.2	370
21...	--	--	--	--	--	--	--	--	--
22...	16	.5	3.7	110	92	4.3	.2	8.9	263
29...	--	--	--	--	--	--	--	--	--
MAY									
20...	--	--	--	--	--	--	--	--	--
28...	14	.4	2.3	170	69	2.9	.2	7.8	276
JUN									
24...	25	.6	2.6	210	140	3.5	.3	7.4	401
JUL									
29...	38	.9	3.4	260	140	5.8	.3	4.2	464
AUG									
27...	38	.9	3.6	250	150	5.9	.3	5.5	463

09243700 MIDDLE CREEK NEAR OAK CREEK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
DEC									
10...	.66	.62	.08	.010	40	150	20	100	110
MAR									
25...	.56	1.0	.25	.030	40	400	<10	230	190
APR									
15...	.50	2.2	.31	.040	40	2900	<10	400	190
21...	--	--	--	--	--	52000	--	2400	--
22...	.36	33.4	1.7	.170	40	39000	50	1500	70
29...	--	--	--	--	--	7400	--	320	--
MAY									
20...	--	--	--	--	--	5500	--	230	--
28...	.38	14.9	.29	.040	40	420	30	130	110
JUN									
24...	.55	2.7	.03	.010	40	400	20	180	140
JUL									
29...	.63	.05	.04	.010	80	340	10	110	320
AUG									
27...	.63	.01	.00	.000	90	580	:10	170	100

DATE	TIME	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
DEC									
10...	1200	--	0	0	--	--	--	--	--
APR									
15...	1030	3.90	1500	--	1	--	0	--	2
21...	1915	10.0	8900	--	10	--	1	--	1
22...	1830	3.50	8000	0	6	1	1	3	3
29...	1530	1.40	850	--	4	--	2	--	--
MAY									
20...	1255	1.10	610	--	2	--	0	--	0
28...	1100	.60	130	--	2	--	1	--	1
AUG									
27...	1110	--	390	10	--	--	--	--	--

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)
DEC									
10...	--	--	--	5	0	--	--	--	--
APR									
15...	2	1	--	4	--	.0	--	1	--
21...	19	31	--	34	--	.2	--	0	--
22...	14	9	5	29	0	.0	.0	0	0
29...	3	10	--	11	--	.0	--	0	--
MAY									
20...	4	8	--	6	--	.0	--	0	--
28...	1	1	--	0	--	.1	--	4	--
AUG									
27...	--	--	--	4	2	--	--	--	--

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
DEC								
10...	--	--	--	--	0	<3	12	5.4
APR								
15...	5	--	1	--	10	--	--	--
21...	37	--	2	--	420	--	--	--
22...	28	25	0	1	170	50	23	9.5
29...	11	--	1	--	60	--	--	--
MAY								
20...	8	--	1	--	40	--	--	--
28...	2	--	0	--	20	--	--	--
AUG								
27...	--	--	--	--	10	6	16	7.4

09243700 MIDDLE CREEK NEAR OAK CREEK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
12...	1230	.02	8	.00	--
MAR					
25...	1155	.98	48	.13	--
APR					
15...	1030	2.2	370	2.2	70
21...	1915	46	4320	537	62
22...	1830	47	2700	343	58
29...	1530	42	670	76	58
MAY					
28...	1100	20	69	3.7	--
JUN					
24...	1125	2.5	65	.44	--
JUL					
29...	1025	.04	51	.01	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	723	342	500	---	---	780
2						---	718	309	502	---	---	776
3						---	705	310	509	---	---	779
4						---	692	316	514	---	---	791
5						---	679	312	524	---	---	792
6						---	667	322	539	---	---	798
7						---	644	342	547	---	---	802
8						---	644	355	546	---	---	786
9						---	629	360	556	---	---	765
10						---	625	356	559	---	---	783
11						---	610	353	567	---	---	898
12						---	601	355	574	---	---	808
13						---	610	367	579	---	---	815
14						---	608	376	579	---	---	821
15						---	592	382	587	670	---	811
16						---	639	382	588	---	---	793
17						---	568	375	608	---	---	798
18						---	508	382	626	---	---	798
19						---	472	390	695	---	---	805
20						---	463	407	681	---	---	793
21						---	435	399	713	---	---	797
22						---	416	412	711	---	---	802
23						---	414	422	---	---	---	799
24						---	399	430	---	---	---	803
25						---	417	430	---	---	---	807
26						---	391	430	---	---	---	801
27						656	390	448	---	---	750	811
28						747	385	426	---	720	---	804
29						739	385	480	---	---	775	806
30						736	355	489	---	---	769	809
31						730	---	494	---	---	775	---

09243700 MIDDLE CREEK NEAR OAK CREEK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1											---	---
2											---	---
3											---	---
4											---	---
5											---	---
6											---	---
7											---	---
8											---	---
9											---	---
10											---	---
11											---	---
12											---	---
13											---	---
14											---	---
15											---	---
16											---	---
17											---	---
18											---	---
19											---	---
20											---	---
21											---	---
22											---	---
23											---	---
24											---	---
25											---	---
26											---	---
27											1.0	1.0
28											1.5	1.0
29											1.5	1.0
30											1.5	1.0
31											1.5	1.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1.5	1.0	9.0	4.0	17.0	8.5			---	---	21.0	8.0
2	1.5	1.0	14.0	3.0	18.5	8.0			---	---	21.5	8.0
3	1.5	1.5	14.0	4.0	20.5	9.0			---	---	21.0	9.0
4	1.5	1.5	14.0	4.0	21.0	9.5			---	---	24.0	9.0
5	2.0	1.0	16.0	5.5	20.5	10.0			---	---	24.5	9.0
6	1.5	1.5	12.0	6.5	21.5	9.5			---	---	23.0	11.5
7	1.5	1.0	11.0	6.5	23.0	7.0			---	---	20.5	13.0
8	1.5	1.0	12.5	5.5	23.5	11.0			---	---	15.0	13.0
9	1.5	1.0	13.5	6.0	24.5	13.0			---	---	17.5	11.5
10	1.5	1.0	14.0	6.5	24.0	13.0			---	---	18.0	13.5
11	1.5	1.5	13.0	7.5	24.5	10.5			---	---	16.0	9.5
12	1.5	1.0	8.0	5.0	23.5	9.0			---	---	15.5	12.0
13	1.5	1.0	11.5	4.5	23.5	11.5			---	---	19.5	9.0
14	1.5	1.0	12.5	4.5	20.0	7.0			---	---	10.0	8.5
15	1.5	1.0	13.5	6.0	20.5	7.0			---	---	19.0	8.5
16	1.5	1.0	13.5	6.5	23.5	7.0			---	---	19.5	11.0
17	2.0	1.0	10.5	5.0	22.0	13.5			---	---	19.5	8.5
18	3.0	1.0	17.0	5.0	19.0	10.5			---	---	18.5	8.0
19	2.0	1.0	16.5	7.0	21.5	12.0			---	---	18.5	11.5
20	3.0	1.0	17.5	13.0	22.5	11.0			---	---	19.5	10.0
21	5.5	1.0	20.0	8.5	24.5	11.5			---	---	16.5	8.5
22	9.5	2.0	23.0	10.0	22.0	11.0			---	---	16.5	7.5
23	9.5	3.5	20.5	11.0	---	---			---	---	15.5	6.0
24	8.5	3.5	17.5	6.5	---	---			---	---	16.0	7.0
25	13.0	2.0	17.0	7.0	---	---			---	---	16.0	6.0
26	14.0	2.5	15.5	6.5	---	---			---	---	16.0	6.0
27	15.0	2.5	18.0	8.0	---	---			---	---	15.0	7.0
28	14.0	3.0	12.0	13.0	---	---			---	---	15.0	7.0
29	14.0	8.0	14.5	9.0	---	---			19.5	12.5	16.5	8.5
30	10.0	5.5	18.5	8.0	---	---			19.5	9.0	16.0	7.0
31	---	---	17.5	6.0	---	---			19.0	9.0	---	---

09243800 FOIDEL CREEK NEAR OAK CREEK, CO

LOCATION.--Lat 40°20'45", long 107°05'04", in NW¼SW¼ sec.31, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on right bank 2.3 mi (3.7 km) downstream from Reservoir No. 1, 6.9 mi (11.1 km) upstream from mouth, and 8.7 mi (14 km) northwest of Oak Creek.

DRAINAGE AREA.--8.61 mi² (22.30 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,880 ft (2,110 m), from topographic map.

REMARKS.--Records good except for winter period, which is poor. Numerous beaver dams above station.

AVERAGE DISCHARGE.--5 years, 0.85 ft³/s (0.024 m³/s), 616 acre-ft/yr (760,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55 ft³/s (1.030 m³/s) Apr. 21, 1980, gage height, 3.38 ft (1.030 m); no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 55 ft³/s (1.56 m³/s) at 1600 Apr. 21, gage height, 3.38 ft (1.030 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.33	1.9	12	2.3	1.1	.02	.00
2	.00	.00	.00	.00	.00	.42	1.9	12	2.1	2.2	.00	.00
3	.00	.00	.00	.00	.00	.50	1.8	11	1.8	.86	.00	.00
4	.00	.00	.00	.00	.00	.71	1.7	9.9	1.5	.46	.00	.00
5	.00	.00	.00	.00	.00	.92	1.6	8.3	1.5	.31	.00	.00
6	.00	.00	.00	.00	.00	1.1	1.5	11	1.4	.25	.00	.00
7	.00	.00	.00	.00	.00	1.3	1.5	12	1.3	.26	.00	.00
8	.00	.00	.00	.00	.00	1.5	1.4	13	1.4	.40	.00	.00
9	.00	.00	.00	.00	.00	1.8	1.3	12	1.3	.21	.00	.00
10	.00	.00	.00	.00	.00	2.0	1.3	11	1.2	.17	.00	.00
11	.00	.00	.00	.00	.00	1.5	1.2	13	1.0	.16	.00	.00
12	.00	.00	.00	.01	.00	1.0	1.1	16	.90	.14	.00	.00
13	.00	.00	.00	.01	.00	1.0	1.1	13	.86	.17	.00	.00
14	.00	.00	.00	.02	.00	1.5	1.8	10	.79	.21	.00	.00
15	.00	.00	.00	.03	.00	2.0	6.0	9.6	.72	.12	.00	.00
16	.00	.00	.00	.02	.00	1.0	14	10	.71	.10	.00	.00
17	.00	.00	.00	.01	.00	.50	12	17	.66	.10	.00	.00
18	.00	.00	.00	.00	.01	.50	20	11	.61	.08	.00	.00
19	.00	.00	.00	.00	.01	.50	24	9.6	.61	.07	.00	.00
20	.00	.00	.00	.00	.00	1.0	27	6.1	.65	.07	.00	.00
21	.00	.00	.00	.00	.00	1.5	32	15	.57	.06	.00	.00
22	.00	.00	.00	.00	.00	2.2	33	8.8	.51	.06	.00	.00
23	.00	.00	.00	.00	.00	2.5	33	5.1	.44	.30	.00	.00
24	.00	.00	.00	.00	.00	2.5	27	4.4	.36	.46	.00	.03
25	.00	.00	.00	.00	.00	2.5	26	3.8	.32	.26	.00	.03
26	.00	.00	.00	.00	.01	2.4	22	3.6	.30	.06	.00	.02
27	.00	.00	.00	.00	.09	2.3	18	3.2	.24	.03	.00	.01
28	.00	.00	.00	.00	.17	2.3	16	2.9	.24	.02	.00	.01
29	.00	.00	.00	.00	.25	2.2	17	2.8	.23	.00	.00	.01
30	.00	.00	.00	.00	---	2.1	17	2.7	.26	.00	.00	.00
31	.00	---	.00	.00	---	2.0	---	2.3	---	.03	.00	---
TOTAL	.00	.00	.00	.10	.54	45.58	365.1	282.1	26.78	8.72	.02	.11
MEAN	.000	.000	.000	.003	.019	1.47	12.2	9.10	.89	.28	.001	.004
MAX	.00	.00	.00	.03	.25	2.5	33	17	2.3	2.2	.02	.03
MIN	.00	.00	.00	.00	.00	.33	1.1	2.3	.23	.00	.00	.00
AC-FT	.00	.00	.00	.2	1.1	90	724	560	53	17	.04	.2

CAL YR 1979 TOTAL 464.84 MEAN 1.27 MAX 19 MIN .00 AC-FT 922
WTR YR 1980 TOTAL 729.05 MEAN 1.99 MAX 33 MIN .00 AC-FT 1450

NOTE.--NO GAGE-HEIGHT RECORD DEC. 12 TO MAR. 25.

BEST DOCUMENT AVAILABLE

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1976 to current year.
WATER TEMPERATURES: May 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since May 1976.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,240 micromhos May 19, 1977; minimum 200 micromhos Apr. 21, 22, 1980.
WATER TEMPERATURES: Maximum, 27.5°C July 11, 1980; minimum, 0.0°C during March and April each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,220 micromhos Sept. 26, 27; minimum, 200 micromhos Apr. 21, 22.
WATER TEMPERATURES: Maximum, 27.5°C July 11; minimum, 0.0°C on several days during April.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
MAR										
25...	1445	2.5	770	7.5	--	--	370	170	82	40
APR										
10...	1515	1.2	720	--	.5	--	--	--	--	--
15...	1320	6.4	620	7.3	3.0	--	--	--	--	--
21...	1730	56	210	7.5	3.0	--	100	--	25	10
22...	1650	54	210	7.5	6.0	--	--	--	--	10
29...	1715	12	450	--	13.5	--	--	--	--	--
MAY										
20...	1410	8.9	520	8.3	17.0	--	--	--	--	--
20...	1415	8.9	--	--	--	--	--	--	--	--
28...	1310	2.6	625	8.2	15.0	10.4	310	100	73	32
JUN										
24...	1330	.28	820	7.6	19.0	7.9	430	280	100	44
AUG										
27...	1400	.00	--	--	--	--	--	--	--	--

DATE	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM AD-SORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
MAR										
25...	26	.6	3.2	200	210	8.9	.2	8.8	503	.68
APR										
10...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	160	--	--	--	--	--	--
21...	6.7	.3	3.8	--	66	1.1	.2	7.5	--	--
22...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	10	.01
MAY										
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
28...	15	.4	2.2	210	110	5.8	.2	8.7	374	.51
JUN										
24...	19	.4	2.4	150	230	56	.4	8.5	551	.75
AUG										
27...	--	--	--	--	--	--	--	--	--	--

BEST DOCUMENT AVAILABLE

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAR										
25...	3.4	.52	--	--	.050	630	17000	110	400	110
APR										
10...	--	--	1.90	.570	--	--	18000	--	360	--
15...	--	--	1.20	.540	--	--	13000	--	270	--
21...	--	--	3.70	1.30	--	40	33000	110	520	10
22...	1.4	--	2.40	.880	--	--	14000	--	330	--
29...	--	--	1.50	.230	--	--	3200	--	70	--
MAY										
20...	--	--	.52	.140	--	--	1800	--	70	--
20...	--	--	--	--	--	--	--	--	--	--
28...	2.6	.05	--	--	.010	60	1600	10	100	60
JUN										
24...	.42	.03	--	--	.040	40	1700	:10	160	90
AUG										
27...	--	--	--	--	--	--	--	--	--	--

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
APR												
10...	1515	8900	--	4	--	1	--	0	8	18	--	10
15...	1320	4700	--	3	--	1	--	2	6	8	--	12
21...	1730	9300	40	5	1	1	2	16	10	24	5	28
22...	1650	6500	--	5	--	1	--	14	8	9	--	20
29...	1715	1300	--	2	--	1	--	1	0	7	--	5
MAY												
20...	1410	700	--	2	--	0	--	0	3	2	--	5
JUN												
24...	1330	--	--	--	--	--	--	--	--	--	--	--

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
APR												
10...	--	.1	--	1	--	22	1	--	70	--	--	--
15...	--	.0	--	1	--	14	1	--	80	--	--	--
21...	3	.1	.0	1	0	28	0	0	240	100	31	9.7
22...	--	--	--	1	--	18	1	--	90	--	--	--
29...	--	.1	--	0	--	7	2	--	80	--	--	--
MAY												
20...	--	.1	--	1	--	6	1	--	20	--	--	--
JUN												
24...	--	--	--	--	--	--	--	--	--	--	--	32

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAR					
25...	1445	2.5	678	4.6	--
APR					
10...	1515	1.2	629	2.0	99
15...	1320	6.4	429	7.4	99
21...	1730	56	1660	251	97
22...	1650	54	1070	156	98
29...	1715	12	229	7.4	77
MAY					
20...	1410	8.9	63	1.5	--
28...	1310	2.6	147	1.0	--
JUN					
24...	1330	.28	208	.16	--
AUG					
27...	1400	.00	79	.00	--

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	900	411	653	806		---
2						---	---	425	664	698		---
3						---	---	429	667	877		---
4						---	---	446	675	889		---
5						---	---	452	683	879		---
6						---	---	454	698	867		---
7						---	---	440	698	861		---
8						---	---	430	700	827		---
9						---	---	430	690	837		---
10						---	750	439	701	844		---
11						---	800	454	715	859		---
12						---	830	453	724	867		---
13						---	810	466	733	858		---
14						---	740	473	734	845		---
15						---	600	487	737	854		---
16						---	540	498	743	---		---
17						---	540	498	753	---		---
18						---	500	519	765	---		---
19						---	450	548	775	---		---
20						---	360	530	778	---		---
21						---	290	597	766	---		---
22						---	300	601	775	---		---
23						---	290	565	780	---		---
24						---	320	570	790	---		1160
25						710	340	596	815	---		1170
26						730	360	605	803	---		1180
27						---	380	625	811	---		1180
28						---	400	626	816	---		1170
29						---	440	639	820	---		1160
30						---	365	644	818	---		---
31						---	---	651	---	1010		---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	.5	.0	10.0	3.5	15.5	8.0	21.5	18.0				
2	---	---	16.0	2.5	17.5	7.5	21.5	16.5				
3	---	---	14.0	4.5	19.0	8.0	23.5	17.0				
4	---	---	14.5	4.0	19.5	9.0	24.5	17.5				
5	---	---	17.0	6.0	19.5	9.5	24.0	16.0				
6	---	---	14.5	7.0	19.0	9.5	23.5	15.0				
7	---	---	13.0	7.5	20.0	9.5	21.0	18.0				
8	---	---	13.0	6.5	20.5	11.0	24.0	17.5				
9	---	---	13.5	6.5	22.5	16.5	24.5	17.0				
10	.0	.0	16.5	7.0	23.5	13.5	25.0	18.5				
11	1.5	.0	13.0	7.5	22.5	15.0	27.5	19.5				
12	2.0	.0	8.0	5.5	22.5	14.0	24.0	19.0				
13	2.0	.0	10.0	5.0	22.5	13.5	22.0	18.5				
14	2.5	.0	9.5	5.5	21.0	13.0	23.5	17.0				
15	3.5	.0	11.5	6.0	21.0	12.0	21.0	16.0				
16	6.5	.0	11.5	7.0	21.0	11.5	---	---				
17	8.0	.0	10.0	6.5	22.5	12.5	---	---				
18	8.0	.0	11.0	6.5	22.0	15.0	---	---				
19	9.5	.0	11.0	8.5	21.0	15.0	---	---				
20	7.5	.0	19.5	9.0	21.5	13.5	---	---				
21	6.5	.0	21.0	8.0	22.5	14.5	---	---				
22	8.0	.0	22.5	10.0	23.5	14.0	---	---				
23	8.5	.5	21.0	11.5	22.5	14.0	---	---				
24	9.0	1.5	17.5	9.0	23.0	14.0	---	---				
25	14.5	.0	15.0	5.5	23.0	14.0	---	---				
26	15.0	.0	16.0	5.0	23.0	15.5	---	---				
27	16.0	1.0	18.0	7.0	23.0	15.5	---	---				
28	15.0	1.5	---	---	23.0	14.5	---	---				
29	13.5	3.5	15.5	8.5	22.5	14.5	---	---				
30	9.0	5.0	18.5	7.5	22.0	17.0	---	---				
31	---	---	17.0	7.5	---	---	23.0	16.5				

BEST DOCUMENT AVAILABLE

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'25", long 106°59'39", in SE¼SE¼ sec.14, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on left bank 0.9 mi (1.4 km) upstream from mouth and 13.6 mi (21.9 km) northwest of Oak Creek.

DRAINAGE AREA.--17.5 mi² (45.3 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

REVISED RECORDS.--WDR CO-78-3: 1976 (M), 1976.

GAGE.--Water-stage recorder. Altitude of gage is 6,730 ft (2,051 m), from topographic map.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--5 years, 2.15 ft³/s (0.061 m³/s), 1,560 acre-ft/yr (1.92 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90 ft³/s (2.55 m³/s) Apr. 22, 1980, gage height, 5.18 ft (1.579 m); no flow many days each year.

EXTREMES FOR CURRENT YEAR.-- Maximum discharge, 90 ft³/s (2.55 m³/s) at 1655 Apr. 22, gage height, 5.18 ft (1.579 m); no flow Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.02	.08	.20	.09	1.0	8.5	25	4.3	8.0	.06	.15
2	.02	.02	.10	.18	.09	1.0	8.5	20	4.3	7.5	.01	.03
3	.02	.02	.11	.15	.10	1.0	8.5	19	3.8	6.2	1.1	.08
4	.02	.02	.12	.15	.10	1.0	8.5	17	3.5	5.0	.78	.23
5	.02	.02	.13	.15	.13	1.0	9.0	15	3.3	3.6	2.3	.32
6	.02	.02	.14	.15	.30	1.0	10	14	3.0	3.2	2.4	.69
7	.01	.02	.15	.15	.32	1.0	10	24	2.8	3.2	2.3	1.3
8	.01	.02	.16	.15	.35	1.0	11	24	2.5	3.7	.53	1.8
9	.01	.02	.17	.15	.31	1.0	12	19	2.2	3.3	.07	1.5
10	.01	.02	.19	.15	.37	1.0	12	18	2.1	2.7	.49	.33
11	.01	.02	.22	.12	.36	1.0	12	21	2.0	3.1	1.2	.20
12	.01	.02	.17	.12	.36	.80	13	30	1.8	13	1.7	.13
13	.01	.02	.15	.10	.36	.70	11	24	1.6	3.2	1.9	.18
14	.01	.02	.17	.10	.36	.70	11	18	1.5	3.6	2.2	.81
15	.01	.02	.15	.10	.36	.50	13	15	1.4	3.4	2.6	1.2
16	.01	.03	.10	.10	.36	.50	22	14	1.3	2.9	2.8	.81
17	.02	.04	.09	.10	.80	.50	29	27	1.4	2.7	2.7	.31
18	.02	.05	.15	.10	1.3	.50	28	21	3.5	.86	2.7	.25
19	.02	.03	.20	.10	2.0	.50	42	14	4.0	.72	1.2	.89
20	.02	.03	.20	.10	3.6	.50	48	12	2.6	1.4	.63	.84
21	.02	.03	.20	.14	3.5	.50	59	12	1.8	1.6	1.8	.47
22	.02	.03	.20	.15	3.0	.50	70	20	1.5	1.1	2.7	.28
23	.02	.03	.20	.15	1.0	.50	76	9.0	3.3	.81	2.6	.17
24	.02	.03	.20	.15	1.0	.50	61	7.3	3.4	.17	2.4	.28
25	.02	.04	.26	.15	1.0	.50	48	6.3	3.3	.15	2.4	.22
26	.02	.05	.19	.15	1.0	.50	44	5.7	3.2	.23	.81	.10
27	.03	.06	.14	.15	1.0	.50	36	5.3	3.2	.17	.56	.03
28	.03	.07	.10	.13	1.0	1.0	31	4.8	3.1	.11	1.0	.00
29	.03	.05	.15	.10	1.0	1.5	30	4.7	3.1	.06	1.5	.01
30	.28	.06	.20	.09	---	3.5	34	4.6	1.4	.05	1.7	.04
31	.03	---	.20	.09	---	6.5	---	4.6	---	.07	.74	---
TOTAL	.82	.93	4.99	4.07	25.52	32.20	816.0	475.3	80.2	85.80	47.88	13.65
MEAN	.026	.031	.16	.13	.88	1.04	27.2	15.3	2.67	2.77	1.54	.46
MAX	.28	.07	.26	.20	3.6	6.5	76	30	4.3	13	2.8	1.8
MIN	.01	.02	.08	.09	.09	.50	8.5	4.6	1.3	.05	.01	.00
AC-FT	1.6	1.8	9.9	8.1	51	64	1620	943	159	170	95	27

CAL YR 1979 TOTAL 995.85 MEAN 2.73 MAX 29 MIN .00 AC-FT 1980
WTR YR 1980 TOTAL 1587.36 MEAN 4.34 MAX 76 MIN .00 AC-FT 3150

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1976 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1976 to current year.
WATER TEMPERATURE: April 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1976.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,520 micromhos Aug. 10, 11, 1980; minimum, 255 micromhos July 1, 1980.
WATER TEMPERATURES: Maximum, 28.5°C July 22, 1980; minimum, 0.0°C several days during March and April 1979 and 1980.
SEDIMENT CONCENTRATIONS: Maximum daily, 3,300 mg/L Apr. 23, 1980; no flow many days most years.
SEDIMENT LOADS: Maximum daily, 702 tons (637 t) Apr. 23, 1980; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 3,520 micromhos Aug. 10, 11; minimum, 255 micromhos July 1.
WATER TEMPERATURES: Maximum, 28.5°C July 22; minimum, 0.0°C several days during March and April.
SEDIMENT CONCENTRATIONS: Maximum daily, 3,300 mg/L Apr. 23; minimum not determined.
SEDIMENT LOADS: Maximum daily, 702 tons (637 t) Apr. 23; minimum, 0.00 ton (0.00 t) many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV										
05...	1200	.03	1420	8.0	5.5	11.0	710	380	170	70
DEC										
10...	1330	.16	1520	7.7	3.0	11.4	760	410	170	81
JAN										
31...	1200	.30	1450	7.4	.5	--	700	350	160	73
MAR										
27...	1545	.55	1250	7.3	.5	11.3	580	370	130	62
APR										
10...	1420	23	1000	--	.5	--	--	--	--	--
15...	1000	8.8	910	7.5	3.5	--	410	220	87	47
17...	1710	27	810	--	8.5	--	--	--	--	--
21...	1857	82	430	7.3	7.0	--	180	100	45	16
22...	1930	76	400	7.2	8.5	--	--	--	--	16
29...	1330	31	770	--	12.5	--	--	--	--	--
MAY										
22...	1150	16	675	7.8	15.5	--	--	--	--	--
28...	1220	6.1	710	8.1	15.0	9.1	310	94	73	32
JUN										
24...	1210	4.3	2950	8.0	18.5	8.9	1600	1500	340	180
JUL										
29...	1120	.08	1390	7.9	20.0	8.4	650	440	140	74
AUG										
27...	1330	1.7	3500	8.0	17.0	8.8	2000	1800	430	220

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
NOV										
05...	55	.9	5.0	330	500	9.5	.2	8.0	1020	1.3
DEC										
10...	67	1.1	3.9	350	490	19	.2	10	1060	1.4
JAN										
31...	67	1.1	3.3	350	490	28	.3	9.6	1050	1.4
MAR										
27...	64	1.2	6.8	210	440	16	.2	9.5	864	1.1
APR										
10...	--	--	--	--	--	--	--	--	--	--
15...	50	1.1	3.7	190	310	12	.3	.2	630	.86
17...	--	--	--	--	--	--	--	--	--	--
21...	16	.5	--	74	100	9.8	.2	8.1	264	.36
22...	--	--	--	--	--	--	--	--	16	.02
29...	--	--	--	--	--	--	--	--	--	--
MAY										
22...	--	--	--	--	--	--	--	--	--	--
28...	27	.7	2.3	220	120	9.8	.2	4.3	418	.57
JUN										
24...	150	1.6	8.3	120	1700	8.8	.3	3.3	2540	3.4
JUL										
29...	74	1.3	5.0	210	570	9.2	.4	1.7	1020	1.3
AUG										
27...	190	1.9	1.2	230	2000	8.3	.2	1.6	3060	4.1

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
NOV										
05...	.08	.27	--	--	.010	80	380	30	610	580
DEC										
10...	.46	.84	--	--	.010	80	440	40	750	800
JAN										
31...	.85	.81	--	--	.010	70	350	30	470	490
MAR										
27...	1.2	2.1	--	--	.180	90	1300	20	260	230
APR										
10...	--	--	2.70	.470	--	--	12000	--	550	--
15...	15.0	1.1	--	--	.100	80	9200	20	360	170
17...	--	--	2.70	.970	--	--	12000	--	420	--
21...	58.4	5.5	15.0	2.10	--	30	55000	--	1400	--
22...	3.2	--	14.0	1.90	--	--	68000	--	1800	--
29...	--	--	2.00	.360	--	--	7400	--	180	--
MAY										
22...	--	--	1.70	.200	--	--	4100	--	170	--
28...	6.8	3.9	--	--	.020	70	1700	30	140	100
JUN										
24...	29.5	17	--	--	.010	110	970	30	200	160
JUL										
29...	.22	3.8	--	--	.000	120	1000	<10	280	240
AUG										
27...	14.0	16	--	--	.000	250	140	50	300	270

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)
DEC												
10...	1330	20	10	--	--	--	--	--	--	--	5	0
APR												
10...	1420	8500	--	3	--	0	--	6	6	12	5	--
15...	1000	3300	--	3	--	1	--	4	5	6	11	--
17...	1710	4900	--	3	--	0	--	--	6	12	8	--
21...	1857	20000	20	10	1	1	1	20	18	31	43	3
22...	1930	13000	--	16	--	2	--	1	24	23	55	--
29...	1330	350	--	3	--	1	--	0	2	10	9	--
MAY												
22...	1150	2000	--	2	--	0	--	0	3	8	6	--
AUG												
27...	1330	90	10	--	--	--	--	--	--	--	3	0

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
DEC											
10...	--	--	--	--	--	--	--	0	9	24	13
APR											
10...	.0	--	2	--	18	1	--	40	--	--	--
15...	.0	--	1	--	15	1	--	50	--	--	--
17...	.1	--	0	--	16	2	--	70	--	--	--
21...	.1	.0	1	0	34	2	1	250	--	41	9.5
22...	--	--	4	--	54	1	--	330	--	--	--
29...	.0	--	1	--	12	5	--	80	--	--	--
MAY											
22...	.1	--	0	--	12	1	--	40	--	--	--
AUG											
27...	--	--	--	--	--	--	--	50	10	3.8	3.4

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV					
05...	1200	.03	65	.01	--
DEC					
10...	1330	.16	36	.02	--
JAN					
31...	1200	.30	--	--	--
MAR					
27...	1545	.55	74	.11	--
APR					
10...	1417	22	565	34	--
10...	1420	23	568	35	78
15...	1000	8.8	402	9.6	64
15...	1015	11	500	15	--
17...	1710	27	302	22	--
21...	1845	54	2250	328	--
21...	1857	82	2250	498	95
22...	1930	76	3290	675	--

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
APR					
29...	1330	31	394	33	90
29...	1340	31	374	31	--
MAY					
09...	1300	18	477	23	--
20...	1158	12	--	256	--
22...	1150	16	--	--	--
28...	1220	6.1	180	3.0	50
28...	1231	4.9	240	3.2	--
JUN					
24...	1210	4.3	134	1.6	--
JUL					
29...	1120	.08	87	.02	--
AUG					
27...	1330	1.7	--	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	---	---	1430	1140	---
2							---	---	---	1830	1180	---
3							---	---	---	2240	2370	---
4							---	---	---	2480	3210	3280
5							---	---	---	2760	3320	3340
6							---	---	---	2890	3440	3400
7							---	---	---	2910	3450	3400
8							1060	---	---	2780	3300	3280
9							1150	724	---	2850	---	3150
10							1040	988	---	2980	3430	---
11							1040	940	---	3060	3480	---
12							1200	863	---	2120	3460	---
13							1200	940	---	2380	3430	---
14							1140	957	---	3010	3380	3260
15							875	666	---	3090	3260	3160
16							715	656	---	3140	3280	3040
17							748	634	---	3080	3320	---
18							717	669	2520	2770	3310	---
19							527	681	2470	2690	3200	---
20							596	672	2070	3130	3250	---
21							556	701	---	3010	3280	---
22							486	768	---	2980	3240	---
23							463	736	---	2860	---	---
24							522	715	2820	2470	---	---
25							607	707	2870	1960	---	---
26							624	---	2920	1490	---	---
27							686	---	2940	1250	3410	---
28							736	704	2960	1310	3410	---
29							745	678	2960	1260	3440	---
30							---	---	2620	1210	3430	---
31							---	---	---	1150	3240	---

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	22.0	16.5	24.0	17.5	---	---
2	---	---	---	---	---	---	24.0	16.5	25.5	15.5	---	---
3	---	---	---	---	---	---	22.5	19.0	22.0	14.5	---	---
4	---	---	---	---	---	---	26.5	17.0	21.0	12.5	19.0	9.5
5	---	---	---	---	---	---	25.5	14.5	20.5	11.5	19.5	9.0
6	---	---	---	---	---	---	26.5	14.0	22.0	13.0	19.0	11.0
7	---	---	---	---	---	---	23.0	17.0	23.5	14.0	18.0	12.5
8	.5	.0	---	---	---	---	25.5	16.5	22.5	14.0	14.5	12.5
9	2.0	.0	15.0	9.5	---	---	25.5	16.0	24.0	12.0	16.0	11.0
10	1.5	.0	16.5	7.5	---	---	27.0	18.0	23.0	10.5	---	---
11	1.0	.0	15.5	6.5	---	---	27.5	19.0	22.0	11.0	---	---
12	1.0	.0	10.0	6.5	---	---	24.0	17.5	17.5	10.5	---	---
13	2.0	.0	13.0	4.5	---	---	23.5	16.5	20.0	12.0	---	---
14	4.0	.0	14.0	5.5	---	---	25.5	15.5	19.5	13.5	17.0	9.0
15	6.0	.5	14.0	6.5	---	---	26.0	15.0	19.5	14.0	15.5	8.5
16	8.0	.5	15.0	6.5	---	---	28.0	14.5	19.0	11.0	16.5	11.5
17	9.0	.5	11.0	5.0	---	---	27.0	15.5	20.0	11.0	---	---
18	11.0	.0	18.5	5.5	---	---	26.0	17.0	20.0	10.5	---	---
19	10.5	.5	18.5	8.0	22.0	15.5	24.5	16.5	18.5	11.0	---	---
20	11.0	1.5	20.0	8.5	24.5	12.5	28.0	14.5	19.0	11.0	---	---
21	11.0	1.5	22.5	8.5	---	---	28.0	15.0	19.5	8.5	---	---
22	9.5	2.5	22.0	12.0	---	---	28.5	14.5	20.5	9.0	---	---
23	9.0	3.0	22.0	11.5	---	---	25.0	17.0	19.5	13.0	---	---
24	9.5	3.5	19.5	10.0	26.0	13.5	27.0	18.0	17.5	13.0	---	---
25	14.0	1.0	17.0	6.5	26.5	13.0	24.0	15.5	19.0	12.0	---	---
26	15.0	3.5	---	---	25.5	15.0	24.5	15.5	18.5	12.0	---	---
27	16.0	4.5	---	---	25.0	15.0	25.5	14.0	18.5	11.0	---	---
28	15.5	5.0	20.5	8.5	26.0	12.5	26.5	14.0	19.5	11.0	---	---
29	12.0	7.0	16.5	9.0	26.5	13.5	24.5	13.0	17.0	11.0	---	---
30	---	---	---	---	23.5	17.0	26.5	16.5	16.5	9.0	---	---
31	---	---	---	---	---	---	25.0	16.0	15.5	9.5	---	---

BEST DOCUMENT AVAILABLE

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.02		.00	.02	---	.00	.08	---	.01
2	.02		.00	.02	---	.00	.10	---	.01
3	.02		.00	.02	---	.00	.11	---	.01
4	.02		.00	.02	---	.00	.12	---	.02
5	.02		.00	.02	65	.00	.13	---	.02
6	.02		.00	.02	---	.00	.14	---	.02
7	.01		.00	.02	---	.00	.15	---	.02
8	.01		.00	.02	---	.00	.16	---	.02
9	.01		.00	.02	---	.00	.17	---	.02
10	.01		.00	.02	---	.00	.19	36	.02
11	.01		.00	.02	---	.00	.22	---	.03
12	.01		.00	.02	---	.00	.17	---	.02
13	.01		.00	.02	---	.00	.15	---	.02
14	.01		.00	.02	---	.00	.17	---	.02
15	.01		.00	.02	---	.00	.15	---	.02
16	.01		.00	.03	---	.00	.10	---	.01
17	.02		.00	.04	---	.00	.09	---	.01
18	.02		.00	.05	---	.00	.15	---	.02
19	.02		.00	.03	---	.00	.20	---	.02
20	.02		.00	.03	---	.00	.20	---	.02
21	.02		.00	.03	---	.00	.20	---	.02
22	.02		.00	.03	---	.00	.20	---	.02
23	.02		.00	.03	---	.00	.20	---	.02
24	.02		.00	.03	---	.00	.20	---	.02
25	.02		.00	.04	---	.00	.26	---	.03
26	.02		.00	.05	---	.00	.19	---	.02
27	.03		.00	.06	---	.00	.14	---	.02
28	.03		.00	.07	---	.00	.10	---	.01
29	.03		.00	.05	---	.00	.15	---	.02
30	.28		.04	.06	---	.00	.20	---	.02
31	.03		.00	---	---	---	.20	---	.02
TOTAL	0.82		0.04	0.93	---	0.00	4.99	---	0.58

BEST DOCUMENT AVAILABLE

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.20		.02	.09		.01	1.0	---	.50
2	.18		.02	.09		.01	1.0	---	.50
3	.15		.02	.10		.01	1.0	---	.40
4	.15		.02	.10		.02	1.0	---	.40
5	.15		.02	.13		.02	1.0	---	.40
6	.15		.02	.30		.04	1.0	---	.40
7	.15		.02	.32		.04	1.0	---	.40
8	.15		.02	.35		.04	1.0	---	.30
9	.15		.02	.31		.04	1.0	---	.30
10	.15		.02	.37		.05	1.0	---	.30
11	.12		.02	.36		.05	1.0	---	.30
12	.12		.02	.36		.05	.80	---	.20
13	.10		.01	.36		.05	.70	---	.15
14	.10		.01	.36		.05	.70	---	.15
15	.10		.01	.36		.05	.50	---	.10
16	.10		.01	.36		.05	.50	---	.10
17	.10		.01	.80		.10	.50	---	.10
18	.10		.01	1.3		.80	.50	---	.10
19	.10		.01	2.0		1.5	.50	---	.10
20	.10		.01	3.6		3.4	.50	---	.10
21	.14		.02	3.5		3.0	.50	---	.10
22	.15		.02	3.0		2.0	.50	---	.10
23	.15		.02	1.0		.50	.50	---	.10
24	.15		.02	1.0		.50	.50	---	.10
25	.15		.02	1.0		.50	.50	---	.10
26	.15		.02	1.0		.50	.50	---	.10
27	.15		.02	1.0		.50	.50	75	.10
28	.13		.01	1.0		.50	1.0	---	.20
29	.10		.01	1.0		.50	1.5	---	.50
30	.09		.01	---			3.5	---	1.1
31	.09		.01	---			6.5	---	---
TOTAL	4.07		0.50	25.52		14.88	32.20	---	7.80

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	8.5	190	4.4	25	338	23	4.3	55	.63
2	8.5	---	4.0	20	253	14	4.3	31	.36
3	8.5	---	4.0	19	248	13	3.8	---	.30
4	8.5	---	4.0	17	210	10	3.5	---	.30
5	9.0	---	6.0	15	192	8.0	3.3	---	.30
6	10	---	7.0	14	213	8.6	3.0	---	.50
7	10	---	7.0	24	1030	81	2.8	85	.64
8	11	250	7.5	24	---	80	2.5	80	.54
9	12	---	9.0	19	560	30	2.2	125	.74
10	12	340	11	18	405	20	2.1	160	.91
11	12	320	10	21	722	49	2.0	140	.76
12	13	305	16	30	2280	193	1.8	145	.71
13	11	---	10	24	1340	87	1.6	---	.70
14	11	---	15	18	672	35	1.5	---	.60
15	13	446	17	15	286	12	1.4	---	.60
16	22	---	35	14	285	11	1.3	---	.60
17	29	602	48	27	---	30	1.4	---	.60
18	28	---	35	21	---	15	3.5	143	1.3
19	42	---	125	14	---	9.0	4.0	175	1.9
20	48	---	170	12	224	7.1	2.6	140	.98
21	59	1700	285	12	304	11	1.8	196	.95
22	70	2360	472	20	885	56	1.5	162	.65
23	76	3300	702	9.0	230	5.6	3.3	299	2.7
24	61	2380	407	7.3	191	3.8	3.4	241	2.1
25	48	2440	320	6.3	166	2.8	3.3	529	4.7
26	44	1180	146	5.7	145	2.2	3.2	575	5.0
27	36	553	54	5.3	143	2.1	3.2	402	3.5
28	31	396	35	4.8	98	1.3	3.1	384	2.4
29	30	347	29	4.7	105	1.3	3.1	391	3.3
30	34	439	41	4.6	---	1.5	1.4	345	1.3
31	---	---	---	4.6	---	1.0	---	---	---
TOTAL	816.0	---	3035.9	475.3	---	824.3	80.2	---	40.57

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	8.0	---	5.0	.06	---	.01	.15	---	.04
2	7.5	---	4.5	.01	---	.00	.03	---	.00
3	6.2	---	3.5	1.1	---	.50	.08	---	.01
4	5.0	---	2.5	.78	---	.30	.23	---	.06
5	3.6	---	2.0	2.3	---	1.0	.32	136	.12
6	3.2	---	1.5	2.4	---	1.0	.69	152	.28
7	3.2	---	1.5	2.3	108	.67	1.3	272	.95
8	3.7	---	2.0	.53	576	.82	1.8	408	2.0
9	3.3	---	1.5	.07	---	.01	1.5	248	1.0
10	2.7	---	1.5	.49	---	2.5	.33	---	.10
11	3.1	---	1.5	1.2	---	.50	.20	---	.06
12	13	---	13	1.7	---	.80	.13	---	.03
13	3.2	---	1.5	1.9	---	.80	.18	---	.05
14	3.6	---	2.0	2.2	---	1.0	.81	---	.30
15	3.4	207	1.9	2.6	---	1.5	1.2	---	1.0
16	2.9	418	3.3	2.8	---	1.5	.81	---	.30
17	2.7	---	1.5	2.7	---	1.5	.31	---	.10
18	.86	---	.40	2.7	---	1.5	.25	---	.07
19	.72	228	.44	1.2	---	1.0	.89	---	.40
20	1.4	168	.63	.63	---	.25	.84	---	.30
21	1.6	168	.72	1.8	---	.80	.47	---	.20
22	1.1	220	.65	2.7	---	1.5	.28	---	.10
23	.81	208	.45	2.6	---	1.5	.17	---	.04
24	.17	61	.03	2.4	---	1.0	.28	---	.10
25	.15	---	.02	2.4	---	1.0	.22	---	.06
26	.23	---	.03	.81	---	.30	.10	---	.02
27	.17	---	.02	.56	184	.28	.03	---	.00
28	.11	---	.01	1.0	160	.43	.00	---	.00
29	.06	---	.00	1.5	168	.68	.01	---	.00
30	.05	---	.00	1.7	184	.84	.04	---	.00
31	.07	---	.01	.74	200	.40	---	---	---
TOTAL	85.80	---	53.61	47.88	---	25.89	13.65	---	7.69
YEAR	1587.36		4011.76						

BEST DOCUMENT AVAILABLE

09244410 YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, CO

LOCATION.--Lat 40°29'18", long 107°09'33", in NW¼SW¼ sec.9, T.6 N., R.87 W., Routt County, Hydrologic Unit 14050001, in bay of Colorado-Ute Electric Co. pumphouse on left bank 300 ft (91 m) downstream from U.S. Highway 40, 0.1 mi (0.2 km) upstream from Sage Creek, 0.5 mi (0.8 km) downstream from diversion point of Gibraltar Canal, and 4.7 mi (7.6 km) east of Hayden.

DRAINAGE AREA.--1,430 mi^2 (3,700 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to current year. Prior to October 1972, records included flow in Gibraltar Canal.

GAGE.--Water-stage recorder. Altitude of gage is 6,380 ft (1,945 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Records show flow of river below Gibraltar Canal diversion. Natural flow of stream affected by diversions for irrigation of about 30,000 acres (121 km^2) above and 200 acres (809,000 m^2) below station, transbasin diversions, storage reservoirs, and return flow from irrigated areas.

AVERAGE DISCHARGE.--15 years, 1,068 ft^3/s (30.25 m^3/s), 773,800 acre-ft/yr (954 hm^3/yr); does not include flow in Gibraltar Canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft^3/s (467 m^3/s) Apr. 27, 1974, gage height, 11.90 ft (3.627 m), from rating curve extended above 12,000 ft^3/s (340 m^3/s); minimum daily, 5.1 ft^3/s (0.14 m^3/s) July 19, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,030 ft^3/s (199 m^3/s) at 1000 May 24, gage height, 9.05 ft (2.758 m); minimum daily, 56 ft^3/s (1.59 m^3/s) Sept. 7, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	205	182	172	187	192	199	4330	4660	2330	321	94
2	83	195	181	172	190	193	200	3630	4730	2710	294	88
3	92	223	180	172	190	194	200	3800	4830	2450	283	79
4	72	234	180	172	192	195	201	3910	5350	2080	271	67
5	60	280	179	172	193	195	205	4010	5890	1820	266	74
6	62	262	177	172	195	195	209	4580	6170	1520	257	70
7	61	246	175	173	195	195	230	5050	6210	1400	256	56
8	61	262	174	173	195	196	250	4800	6040	1620	247	56
9	67	262	172	173	195	197	270	4930	6160	1390	238	71
10	68	246	170	174	196	197	290	4740	6210	1260	222	85
11	70	242	169	175	195	197	320	4980	6280	1160	210	90
12	69	238	168	176	194	198	370	5560	6150	1060	199	106
13	71	226	168	175	193	198	410	4420	5800	1000	164	148
14	71	220	168	175	192	199	493	3540	5340	970	211	129
15	72	210	167	176	191	198	615	3340	4850	875	145	97
16	86	217	167	176	190	198	841	3430	4150	767	234	81
17	106	215	166	176	190	197	995	3960	3870	673	204	77
18	115	210	166	176	190	197	1130	3600	3810	564	169	71
19	120	205	167	175	189	196	1350	3400	3480	507	147	66
20	150	201	168	175	189	195	1720	3600	3390	488	122	68
21	233	200	169	176	188	195	2330	4040	3440	420	109	78
22	211	200	169	176	189	196	2980	5190	3370	391	103	81
23	181	199	170	177	189	197	3500	5990	3250	373	103	112
24	165	198	170	178	190	197	4000	6470	3090	349	109	98
25	171	195	170	179	190	196	3660	5810	2980	353	129	79
26	178	194	170	180	191	195	3720	4840	2890	352	139	84
27	184	192	171	181	191	195	3610	4630	2890	339	153	88
28	190	190	171	182	191	195	3690	4870	2520	301	127	93
29	198	185	171	183	192	196	3920	5270	2170	275	106	98
30	203	184	172	184	---	197	4740	4520	2150	283	95	102
31	212	---	172	185	---	198	---	4780	---	297	92	---
TOTAL	3763	6536	5319	5461	5552	6079	46648	140020	132120	30377	5725	2586
MEAN	121	218	172	176	191	196	1555	4517	4404	980	185	86.2
MAX	233	280	182	185	196	199	4740	6470	6280	2710	321	148
MIN	60	184	166	172	187	192	199	3340	2150	275	92	56
AC-FT	7460	12960	10550	10830	11010	12060	92530	277700	262100	60250	11360	5130

CAL YR 1979 TOTAL 455245 MEAN 1247 MAX 10300 MIN 57 AC-FT 903000
WTR YR 1980 TOTAL 390186 MEAN 1066 MAX 6470 MIN 56 AC-FT 773900

09244410 YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT 25...	0930	164	350	8.1	5.0	10.2	130	19	32	12	18
NOV 28...	1020	E190	359	7.9	.0	--	140	17	35	12	24
DEC 20...	1200	168	369	7.7	.0	--	130	14	34	12	23
FEB 06...	1200	195	360	7.5	.0	8.6	140	27	35	12	21
MAR 19...	1030	1700	407	7.5	.0	9.3	150	48	36	14	28
MAY 13...	1100	4300	216	7.3	5.0	8.4	91	32	23	8.2	7.8
JUN 19...	1200	3770	70	6.9	9.0	7.3	29	8	7.8	2.2	2.8
JUL 10...	1010	571	195	7.3	18.0	6.4	71	14	18	6.3	8.3
SEP 03...	1055	88	360	7.9	15.0	7.8	140	28	34	13	22

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT 25...	.7	2.6	110	54	8.5	.2	7.8	201	.27	89.0
NOV 28...	.9	2.6	120	51	9.8	.2	11	218	.30	E88.3
DEC 20...	.9	2.5	120	50	11	.2	13	218	.30	98.9
FEB 06...	.8	2.2	110	53	4.8	.2	14	208	.28	110
MAR 19...	1.0	2.2	100	74	11	.2	11	237	.32	1090
MAY 13...	.4	1.6	59	40	2.2	.2	10	129	.18	1500
JUN 19...	.2	.7	21	8.0	.6	.1	6.0	41	.06	417
JUL 10...	.4	1.4	57	30	4.1	.3	6.9	110	.15	170
SEP 03...	.8	2.2	110	60	9.1	.2	1.7	209	.28	49.7

E ESTIMATED.

09244410 YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
OCT 25...	.00	.000	.48	.48	.48	.040	50	100	4.2	--
NOV 28...	.11	.050	.43	.48	.59	.020	50	80	9.7	9.1
DEC 20...	.23	.150	.85	1.00	1.2	.050	90	70	--	--
FEB 06...	.36	.240	.33	.57	.93	.070	50	100	4.2	3.4
MAR 19...	.43	.270	1.3	1.60	2.0	.100	50	60	4.8	1.9
MAY 13...	.30	.060	.73	.79	1.1	.140	40	30	9.9	5.9
JUN 19...	.03	.030	.39	.42	.45	.040	30	80	5.9	5.4
JUL 18...	.00	.000	.49	.49	.49	.020	30	90	6.6	4.5
SEP 03...	.00	.040	.56	.60	.60	.030	70	70	--	8.5

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
MAY 13...	1100	520	30	2	1	0	<1	0	<1
SEP 03...	1055	50	10	2	2	0	<1	0	<1

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
MAY 13...	0	0	6	3	5	0	60	10	.1
SEP 03...	0	0	37	2	7	0	40	20	.0

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAY 13...	.0	0	3	1	0	1.0	20	<3
SEP 03...	.0	4	2	0	0	2.0	100	<3

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 25...	1010	171	8	3.7
NOV 28...	1020	E190	4	1.6
FEB 06...	1200	195	13	6.8
MAR 19...	1030	1700	14	64
MAY 09...	1600	5280	180	2570
MAY 28...	1700	5110	84	1160
JUN 19...	1200	3770	44	448
JUL 18...	1010	571	23	35
SEP 03...	1055	88	7	1.7

E ESTIMATED.

09244460 WATERING TROUGH GULCH NEAR HAYDEN, CO

LOCATION.--Lat 40°22'36", long 107°16'48", in SE¼NE¼ sec.20, T.5 N., R.88 W., Routt County, Hydrologic Unit 14050001, on right bank 1.4 mi (2.3 km) upstream from confluence with Hubberson Gulch and 8.1 mi (13.0 km) south of Hayden.

DRAINAGE AREA.--2.65 mi² (6.86 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,920 ft (2,109 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5.8 ft³/s (0.16 m³/s) Apr. 29, 1980, gage height, 1.53 ft (0.466 m); no flow several days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5.8 ft³/s (0.16 m³/s) at 2000 Apr. 29, gage height, 1.53 ft (0.466 m); no flow Dec. 23 to Jan. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										.05	.03	.03
2										.05	.03	.03
3										.05	.03	.03
4										.05	.03	.03
5										.05	.03	.03
6										.05	.03	.03
7										.05	.03	.03
8										.05	.03	.03
9										.05	.03	.03
10										.05	.03	.03
11										.05	.03	.03
12										.05	.03	.03
13										.05	.03	.03
14										.05	.03	.03
15										.05	.03	.03
16										.05	.03	.03
17										.05	.05	.03
18										.05	.06	.02
19										.06	.05	.02
20										.05	.06	.02
21										.05	.04	.02
22										.05	.03	.02
23										.05	.03	.02
24										.05	.03	.02
25										.05	.03	.02
26										.05	.03	.03
27										.05	.03	.03
28										.04	.03	.03
29										.04	.03	.02
30										.04	.03	.02
31										.04	.03	---
TOTAL										1.52	1.04	.80
MEAN										.049	.034	.027
MAX										.06	.06	.03
MIN										.04	.03	.02
AC-FT										3.0	2.1	1.6

BEST DOCUMENT AVAILABLE

09244460 WATERING TROUGH GULCH NEAR HAYDEN, CO--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.02	.02	.00	.01	.02	.02	2.3	.21	.06	.04	.05
2	.02	.02	.02	.00	.01	.02	.02	1.7	.19	.06	.04	.05
3	.02	.02	.02	.00	.01	.02	.03	1.6	.18	.06	.04	.04
4	.02	.02	.02	.00	.01	.02	.03	1.9	.16	.06	.04	.05
5	.02	.02	.02	.00	.01	.02	.03	1.7	.16	.06	.04	.05
6	.02	.02	.01	.00	.01	.02	.03	1.6	.14	.06	.04	.05
7	.02	.02	.01	.00	.01	.02	.03	1.9	.14	.06	.04	.04
8	.02	.03	.01	.00	.01	.02	.01	1.2	.14	.06	.04	.05
9	.02	.02	.01	.00	.01	.02	.02	.79	.12	.05	.05	.06
10	.02	.02	.01	.01	.01	.02	.01	.71	.11	.05	.05	.06
11	.02	.02	.01	.01	.01	.02	.01	.63	.11	.05	.05	.06
12	.02	.02	.01	.01	.01	.02	.02	.60	.09	.05	.05	.06
13	.02	.02	.01	.01	.01	.02	.02	.57	.08	.05	.05	.06
14	.02	.02	.01	.01	.01	.02	.03	.60	.08	.05	.05	.05
15	.02	.02	.01	.01	.02	.02	.04	.57	.08	.05	.08	.04
16	.03	.02	.01	.01	.02	.02	.06	.52	.08	.05	.07	.04
17	.03	.02	.01	.01	.02	.02	.07	.46	.07	.05	.06	.04
18	.03	.02	.01	.01	.02	.02	.09	.63	.07	.05	.06	.04
19	.03	.02	.02	.01	.02	.02	.09	.76	.07	.05	.06	.04
20	.04	.02	.02	.01	.02	.02	.16	.73	.07	.05	.06	.05
21	.03	.02	.02	.01	.02	.02	.16	.54	.07	.05	.06	.05
22	.03	.02	.01	.01	.02	.02	1.8	.57	.07	.05	.05	.05
23	.03	.03	.00	.01	.02	.02	1.6	.68	.07	.04	.06	.05
24	.03	.03	.00	.01	.02	.02	1.2	.49	.06	.04	.07	.06
25	.03	.03	.00	.01	.02	.02	.78	.37	.06	.04	.07	.06
26	.03	.03	.00	.01	.02	.02	1.2	.28	.06	.04	.07	.07
27	.03	.02	.00	.01	.02	.02	1.6	.26	.06	.04	.06	.07
28	.03	.02	.00	.01	.02	.02	2.4	.24	.07	.04	.05	.07
29	.03	.02	.00	.01	.02	.02	3.2	.24	.07	.04	.05	.07
30	.03	.02	.00	.01	---	.02	3.4	.23	.06	.04	.05	.07
31	.02	---	.00	.01	---	.02	---	.21	---	.04	.05	---
TOTAL	.78	.65	.30	.22	.44	.62	18.16	25.58	3.00	1.54	1.65	1.60
MEAN	.025	.022	.010	.007	.015	.020	.61	.83	.10	.050	.053	.053
MAX	.04	.03	.02	.01	.02	.02	3.4	2.3	.21	.06	.08	.07
MIN	.02	.02	.00	.00	.01	.02	.01	.21	.06	.04	.04	.04
AC-FT	1.5	1.3	.6	.4	.9	1.2	36	51	6.0	3.1	3.3	3.2

WTR YR 1980 TOTAL 54.54 MEAN .15 MAX 3.4 MIN .00 AC-FT 108

NOTE.--NO GAGE-HEIGHT RECORD JULY 2 TO AUG. 6.

09244460 WATERING TROUGH GULCH NEAR HAYDEN, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1979.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
NOV												
05...	1600	.02	1070	8.0	5.5	6.8	550	200	120	60	40	.7
APR												
01...	1630	.01	1050	7.8	3.5	10.8	510	180	110	58	38	.7
15...	1615	.08	825	7.5	2.5	--	400	140	87	45	27	.6
22...	1445	2.0	744	7.6	--	--	350	140	75	39	26	.6
MAY												
28...	1550	.22	875	7.6	14.5	10.4	420	130	87	49	33	.7
JUN												
24...	1550	.05	980	7.7	13.5	7.2	470	180	98	54	35	.7
JUL												
29...	1420	.05	1070	7.7	12.0	7.5	520	130	110	59	40	.8
AUG												
27...	1640	.07	1070	7.7	11.0	6.6	510	120	110	57	40	.8

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
NOV												
05...	5.6	350	280	10	.3	12	739	1.01	.04	.11	--	.040
APR												
01...	4.8	330	240	9.7	.2	11	671	.91	.02	.20	--	.040
15...	5.6	260	180	7.6	.2	.1	510	.69	.11	.26	.81	.030
22...	6.6	210	200	8.0	.3	.2	486	.66	2.62	.94	1.0	.080
MAY												
28...	5.7	290	170	8.5	.2	11	540	.73	.32	.18	--	.010
JUN												
24...	4.9	290	250	9.3	.3	11	637	.87	.09	.11	--	.030
JUL												
29...	5.6	390	210	9.8	.4	12	683	.93	.08	.32	--	.030
AUG												
27...	6.3	390	210	10	.3	12	684	.93	.13	.78	--	.000

DATE	TIME	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ALUMI-NUM, TOTAL (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ALUM-INUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
NOV												
05...	1600	--	--	--	--	--	--	--	--	90	--	--
APR												
01...	1630	--	--	--	--	--	--	--	--	110	--	--
15...	1615	.120	--	300	--	--	1	--	--	80	1	--
22...	1445	.180	--	180	20	--	1	1	--	70	1	<1
25...	1315	.120	--	230	--	--	1	--	--	--	0	--
MAY												
28...	1550	--	--	--	--	--	--	--	--	120	--	--
JUN												
24...	1550	--	--	--	--	--	--	--	--	70	--	--
26...	1200	--	830	--	--	3400	--	--	7	--	--	--
26...	1230	--	1100	--	--	3900	--	--	5	--	--	--
26...	1300	--	670	--	--	2000	--	--	5	--	--	--
26...	1330	--	420	--	--	2800	--	--	6	--	--	--
26...	1400	--	560	--	--	1500	--	--	5	--	--	--
26...	1430	--	460	--	--	1500	--	--	4	--	--	--
JUL												
29...	1420	--	--	--	--	--	--	--	--	120	--	--
AUG												
27...	1640	--	--	180	10	--	--	--	--	120	--	--

09244460 WATTERING TROUGH GULCH NEAR HAYDEN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, TOTAL (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, TOTAL (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL (UG/L AS PB)
NOV												
05...	--	--	--	--	--	--	--	--	600	10	--	--
APR												
01...	--	--	--	--	--	--	--	--	2100	10	--	--
15...	--	0	--	0	--	0	--	--	1000	30	--	2
22...	--	4	--	2	--	5	22	--	1600	10	--	5
25...	--	1	--	0	--	4	--	--	630	--	--	4
MAY												
28...	--	--	--	--	--	--	--	--	420	30	--	--
JUN												
24...	--	--	--	--	--	--	--	--	310	20	--	--
26...	1	--	4	--	10	--	--	7	--	--	2700	--
26...	1	--	4	--	10	--	--	13	--	--	4700	--
26...	1	--	3	--	10	--	--	13	--	--	4600	--
26...	1	--	4	--	10	--	--	13	--	--	2600	--
26...	1	--	3	--	10	--	--	5	--	--	2000	--
26...	1	--	2	--	10	--	--	3	--	--	1600	--
JUL												
29...	--	--	--	--	--	--	--	--	1700	10	--	--
AUG												
27...	--	--	--	--	--	--	--	--	640	10	--	4

DATE	LEAD, DISSOLVED (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	MOLYBDENUM, TOTAL (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)
NOV												
05...	--	--	60	30	--	--	--	--	--	--	--	--
APR												
01...	--	--	150	10	--	--	--	--	--	--	--	--
15...	--	--	80	20	--	.0	--	--	1	--	3	--
22...	1	--	70	20	--	.0	.0	--	0	<10	7	4
25...	--	--	20	--	--	.0	--	--	2	--	2	--
MAY												
28...	--	--	40	20	--	--	--	--	--	--	--	--
JUN												
24...	--	--	40	20	--	--	--	--	--	--	--	--
26...	--	10	--	--	160	--	--	.02	--	--	--	--
26...	--	10	--	--	310	--	--	.01	--	--	--	--
26...	--	20	--	--	95	--	--	.02	--	--	--	--
26...	--	10	--	--	230	--	--	.01	--	--	--	--
26...	--	10	--	--	210	--	--	.01	--	--	--	--
26...	--	10	--	--	190	--	--	.01	--	--	--	--
JUL												
29...	--	--	140	20	--	--	--	--	--	--	--	--
AUG												
27...	0	--	60	20	--	--	--	--	--	--	--	--

BEST DOCUMENT AVAILABLE

09244460 WATTERING TROUGH GULCH NEAR HAYDEN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)
NOV											
05...	--	--	--	--	--	--	--	--	--	--	--
APR											
01...	--	--	--	--	--	--	--	--	--	--	--
15...	1	--	--	10	--	--	--	--	--	--	--
22...	1	1	--	20	7	--	11	7.6	--	--	--
25...	1	--	--	20	--	--	--	--	--	--	--
MAY											
28...	--	--	--	--	--	--	--	--	--	--	--
JUN											
24...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	0	--	--	29	--	--	72	.0	72
26...	--	--	0	--	--	41	--	--	55	.0	55
26...	--	--	0	--	--	28	--	--	29	2.4	31
26...	--	--	0	--	--	26	--	--	68	.1	68
26...	--	--	0	--	--	23	--	--	40	.2	40
26...	--	--	0	--	--	13	--	--	15	.1	15
JUL											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
27...	--	--	--	20	< 3	--	8.1	4.8	--	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1030	980				---	716	---	---	1120	1120
2	---	1030	980				---	739	---	838	1190	1120
3	---	1030	980				---	747	---	865	1150	1110
4	---	1030	---				---	759	---	889	1150	1130
5	---	1030	---				---	767	---	917	1130	1140
6	---	1030	---				---	773	---	928	1100	1130
7	---	1030	---				---	770	---	845	1070	1130
8	---	1030	---				---	775	---	858	1020	1120
9	980	1020	---				---	---	---	900	---	1080
10	980	1030	---				959	---	---	915	---	1080
11	990	1030	---				950	---	---	939	---	1060
12	1020	1030	---				944	---	---	958	---	1040
13	1010	1030	---				933	---	---	997	---	1010
14	940	1020	---				899	---	---	1020	---	1050
15	990	1020	---				878	---	---	1150	---	1080
16	1000	1030	---				892	---	---	1270	---	1090
17	1000	1020	---				895	---	---	1260	---	1080
18	1000	1020	---				884	---	---	1260	---	1090
19	1010	1020	---				885	---	---	1230	---	1090
20	1000	1020	---				871	---	---	1210	---	1080
21	1010	1020	---				896	---	---	1210	---	1080
22	1010	1020	---				671	---	---	1220	---	1080
23	1040	1010	---				650	---	---	1230	---	1080
24	1050	1030	---				660	---	920	1230	1090	1090
25	1040	1000	---				703	---	910	1230	1070	1100
26	1040	920	---				---	---	---	1240	1080	1090
27	1040	960	---				694	---	---	1250	1070	1090
28	1040	980	---				701	---	---	1260	1100	1070
29	1050	970	---				713	---	---	1070	1110	1080
30	1040	980	---				698	---	---	1090	1120	1070
31	1030	---	---				---	---	---	1090	1130	---

09244460 WATTERING TROUGH GULCH NEAR HAYDEN, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	6.0	5.0	5.0	3.0						
2	---	---	5.5	4.0	6.0	1.5						
3	---	---	5.0	4.0	4.5	3.5						
4	---	---	6.0	4.0	---	---						
5	---	---	6.0	4.5	---	---						
6	---	---	6.0	5.0	---	---						
7	---	---	6.0	4.5	---	---						
8	---	---	6.0	4.5	---	---						
9	9.0	7.5	6.0	3.0	---	---						
10	9.5	7.5	5.0	3.5	---	---						
11	9.5	7.5	5.5	4.0	---	---						
12	9.5	7.5	6.0	4.5	---	---						
13	9.0	7.5	6.0	4.0	---	---						
14	9.5	6.0	6.0	4.5	---	---						
15	7.0	6.0	5.5	5.0	---	---						
16	7.0	6.0	5.5	4.0	---	---						
17	7.5	6.5	6.0	4.5	---	---						
18	8.0	6.0	5.0	3.5	---	---						
19	8.0	6.0	4.5	3.5	---	---						
20	7.0	5.0	5.5	4.5	---	---						
21	6.5	5.0	5.5	4.0	---	---						
22	7.0	6.0	5.5	2.5	---	---						
23	7.0	5.5	5.5	4.0	---	---						
24	7.0	6.0	6.0	3.5	---	---						
25	7.0	5.0	5.5	1.0	---	---						
26	6.5	5.0	6.5	5.0	---	---						
27	6.5	5.0	6.0	4.0	---	---						
28	6.5	5.0	6.0	4.5	---	---						
29	6.0	4.5	6.0	4.0	---	---						
30	5.5	4.5	5.0	3.0	---	---						
31	6.0	4.0	---	---	---	---						

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	10.5	5.0	---	---	---	---	13.0	10.5	10.5	8.5
2	---	---	14.0	4.0	---	---	13.0	10.0	12.5	10.0	10.5	8.5
3	---	---	13.0	5.0	---	---	14.0	9.5	12.5	9.5	10.5	9.0
4	---	---	14.5	5.0	---	---	14.0	9.5	12.0	9.0	11.0	8.5
5	---	---	14.5	6.5	---	---	14.0	9.0	12.0	9.0	11.0	8.5
6	---	---	14.0	7.0	---	---	14.0	8.5	12.5	9.5	11.0	9.0
7	---	---	13.5	7.5	---	---	13.0	9.5	12.5	9.5	11.0	10.0
8	---	---	13.5	7.0	---	---	14.0	10.0	12.0	9.5	11.0	10.0
9	---	---	---	---	---	---	13.5	9.5	12.5	10.0	11.0	10.0
10	5.0	3.5	---	---	---	---	13.5	10.0	12.0	9.5	11.5	9.5
11	5.5	3.0	---	---	---	---	14.0	10.5	11.5	9.0	10.5	9.0
12	5.5	2.5	---	---	---	---	13.5	9.5	11.5	9.0	10.5	9.5
13	5.5	2.5	---	---	---	---	12.5	10.5	12.0	9.5	11.0	9.0
14	6.0	3.0	---	---	---	---	13.5	9.5	11.5	10.0	10.5	8.5
15	5.0	3.0	---	---	---	---	13.0	9.0	13.0	11.0	10.5	8.5
16	4.5	2.5	---	---	---	---	13.0	9.0	11.5	9.5	10.5	9.0
17	4.5	2.5	---	---	---	---	13.0	9.5	12.0	9.5	10.5	8.5
18	4.0	2.5	---	---	---	---	13.0	9.5	11.5	9.5	10.5	8.0
19	4.0	2.5	---	---	---	---	12.5	9.5	11.5	9.0	10.5	9.0
20	3.5	2.5	---	---	---	---	12.5	9.0	11.0	9.0	10.5	8.5
21	5.0	1.0	---	---	---	---	12.5	9.0	11.0	8.5	10.0	8.0
22	7.5	1.0	---	---	---	---	12.5	9.0	11.0	8.5	9.5	7.5
23	11.5	2.0	---	---	---	---	12.0	9.5	12.0	9.5	9.5	7.0
24	13.0	3.5	---	---	13.5	9.0	12.5	9.5	11.5	10.0	10.0	7.5
25	15.5	1.5	---	---	9.0	4.0	12.5	9.0	12.5	9.5	9.5	7.5
26	---	---	---	---	---	---	12.0	9.0	11.5	9.5	10.0	7.5
27	17.5	3.0	---	---	---	---	12.0	8.5	11.0	9.0	10.0	7.5
28	15.5	4.5	---	---	---	---	12.0	8.5	11.5	9.0	10.0	8.0
29	17.0	5.5	---	---	---	---	12.5	11.0	11.0	9.0	10.0	8.0
30	12.5	6.0	---	---	---	---	12.5	10.0	10.5	8.5	10.0	8.0
31	---	---	---	---	---	---	12.5	10.0	10.5	8.5	---	---

09244464 HUBBERSON GULCH NEAR HAYDEN, CO

LOCATION.--Lat 40°23'01", long 107°16'18", in NW¼SW¼ sec.16, T.5 N., R.88 W., Routt County, Hydrologic Unit 14050001, on left bank 0.3 mi (0.5 km) upstream from confluence with Watering Trough Gulch and 7.0 mi (11.3 km) south of Hayden.

DRAINAGE AREA.--8.08 mi² (20.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1979 to September 1980.

GAGE.--Water-stage recorder. Altitude of gage is 6,780 ft (2,067 m), from topographic map.

REMARKS.--Records good except for periods of no gage-height record, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed discharge, 43 ft³/s (1.22 m³/s), Apr. 20, 1980, gage height, 1.90 ft (0.579 m), result of discharge measurement; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 43 ft³/s (1.22 m³/s) at 1730 Apr. 20, gage height, 1.90 ft (0.579 m), result of discharge measurement; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1										.10	.00	.01
2										.10	.00	.01
3										.10	.00	.01
4										.10	.00	.01
5										.10	.00	.01
6										.10	.00	.01
7										.10	.00	.01
8										.10	.00	.01
9										.10	.00	.01
10										.10	.00	.01
11										.16	.00	.01
12										.16	.00	.01
13										.15	.00	.01
14										.11	.00	.01
15										.08	.00	.01
16										.07	.00	.01
17										.07	.02	.01
18										.06	.02	.01
19										.06	.02	.01
20										.05	.04	.01
21										.05	.04	.01
22										.04	.02	.01
23										.03	.02	.01
24										.03	.02	.01
25										.02	.02	.00
26										.02	.02	.00
27										.01	.02	.00
28										.01	.01	.00
29										.00	.01	.00
30										.00	.01	.00
31										.00	.01	---
TOTAL										2.18	.30	.24
MEAN										.070	.010	.008
MAX										.16	.04	.01
MIN										.00	.00	.00
AC-FT										4.3	.6	.5

09244464 HUBBERSON GULCH NEAR HAYDEN, CO--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.06	.08	.10	.24	.22	7.3	1.9	.53	.02	.07
2	.00	.00	.06	.08	.10	.23	.23	6.9	1.8	.70	.02	.07
3	.00	.00	.06	.08	.10	.23	.23	7.0	1.6	.53	.02	.07
4	.00	.00	.06	.08	.11	.21	.32	6.7	1.5	.39	.01	.05
5	.00	.00	.06	.08	.11	.20	.55	6.7	1.4	.31	.02	.04
6	.00	.01	.06	.08	.11	.33	.68	7.1	1.3	.26	.01	.04
7	.00	.03	.06	.08	.11	.20	.49	7.2	1.3	.33	.00	.04
8	.00	.03	.06	.08	.11	.20	.43	6.6	1.2	.39	.00	.04
9	.00	.01	.06	.08	.11	.19	.67	6.2	1.2	.26	.00	.04
10	.00	.01	.06	.08	.11	.19	.85	5.6	1.1	.23	.00	.03
11	.00	.02	.06	.09	.11	.24	.59	6.7	1.0	.22	.00	.01
12	.00	.03	.06	.09	.11	.35	.64	6.4	.97	.20	.00	.01
13	.00	.02	.06	.09	.11	.23	.80	5.6	.92	.21	.00	.01
14	.00	.02	.06	.09	.11	.21	1.4	5.0	.86	.21	.05	.01
15	.00	.03	.06	.09	.12	.22	2.4	4.6	.84	.17	.04	.01
16	.00	.03	.06	.09	.12	.31	3.8	4.6	.81	.16	.00	.03
17	.00	.00	.06	.09	.12	.22	6.1	5.4	.85	.15	.00	.03
18	.00	.00	.07	.09	.12	.22	9.1	4.4	.80	.13	.00	.03
19	.00	.01	.07	.09	.12	.23	12	4.0	.78	.12	.00	.02
20	.00	.06	.07	.09	.12	.23	30	3.7	.75	.12	.00	.08
21	.00	.06	.07	.09	.14	.25	27	3.5	.70	.10	.00	.07
22	.00	.06	.07	.10	.21	.32	26	3.2	.64	.09	.01	.06
23	.00	.06	.07	.10	.20	.32	19	3.0	.64	.09	.03	.07
24	.00	.07	.07	.10	.19	.36	10	2.9	.58	.09	.22	.07
25	.00	.08	.07	.10	.21	.33	8.4	2.5	.53	.09	.10	.08
26	.00	.06	.07	.10	.21	.24	8.0	2.4	.53	.07	.07	.08
27	.00	.08	.07	.10	.23	.25	8.1	2.3	.47	.07	.07	.08
28	.00	.06	.07	.10	.23	.23	7.9	2.2	.47	.05	.07	.08
29	.00	.06	.07	.10	.23	.22	8.5	2.1	.47	.02	.07	.07
30	.00	.06	.08	.10	---	.22	9.6	2.1	.41	.05	.07	.07
31	.00	---	.08	.10	---	.22	---	1.9	---	.05	.07	---
TOTAL	.00	.96	2.02	2.79	4.08	7.64	204.00	145.8	28.32	6.39	.97	1.46
MEAN	.000	.032	.065	.090	.14	.25	6.80	4.70	.94	.21	.031	.049
MAX	.00	.08	.08	.10	.23	.36	30	7.3	1.9	.70	.22	.08
MIN	.00	.00	.06	.08	.10	.19	.22	1.9	.41	.02	.00	.01
AC-FT	.00	1.9	4.0	5.5	8.1	15	405	289	56	13	1.9	2.9

WTR YR 1980 TOTAL 404.43 MEAN 1.11 MAX 30 MIN .00 AC-FT 802

NOTE.--NO GAGE-HEIGHT RECORD DEC. 13 TO FEB. 19.

09244464 HUBBERSON GULCH NEAR HAYDEN, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1979.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
DEC								
10...	1515	.06	1445	7.8	2.5	9.2	750	380
FEB								
20...	1330	--	1290	8.0	1.5	10.6	640	300
APR								
01...	1550	.20	1520	8.1	3.0	10.5	740	400
15...	1515	2.8	725	7.7	1.0	>8.7	--	--
16...	1545	5.0	680	--	1.5	--	--	--
16...	1555	--	--	--	--	--	--	--
20...	1730	43	340	7.4	1.0	--	160	55
21...	1545	33	345	7.8	5.0	--	--	--
22...	1415	32	370	7.8	8.0	--	--	--
25...	1245	4.4	--	--	--	--	--	--
MAY								
01...	1140	6.8	560	--	6.5	--	--	--
28...	1525	2.2	750	8.4	19.0	10.2	380	160
JUN								
24...	1455	.58	1000	8.2	24.5	8.4	500	330
JUL								
29...	1345	.01	1600	7.9	25.0	6.5	780	470
AUG								
27...	1610	.01	1300	8.0	20.5	6.5	610	310

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
DEC									
10...	150	91	73	1.2	4.6	370	470	18	.2
FEB									
20...	130	76	54	.9	4.7	340	420	11	.2
APR									
01...	140	96	74	1.2	4.3	340	560	12	.2
15...	--	--	--	--	4.0	150	240	4.8	.3
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
20...	34	17	11	.4	4.5	100	70	3.4	.3
21...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--
MAY									
01...	--	--	--	--	--	--	--	--	--
28...	70	50	24	.5	3.7	220	190	7.6	.2
JUN									
24...	80	72	39	.8	4.2	170	370	11	.3
JUL									
29...	130	110	82	1.3	5.1	310	610	15	.4
AUG									
27...	110	82	54	1.0	6.8	300	410	13	.3

09244464 HUBBERSON GULCH NEAR HAYDEN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)
DEC								
10...	11	1040	1.41	.17	.05	--	--	.010
FEB								
20...	10	912	1.24	--	.13	--	--	.010
APR								
01...	7.9	1100	1.50	.59	.31	--	--	.000
15...	6.1	344	.47	2.60	.67	2.9	3.900	.000
16...	--	--	--	--	--	11	3.300	--
16...	--	--	--	--	--	10	2.900	--
20...	8.0	212	.29	24.6	.87	12	2.700	.010
21...	--	--	--	--	--	12	3.100	--
22...	--	--	--	--	--	11	2.300	--
25...	--	--	--	--	--	2.2	.440	--
MAY								
01...	--	--	--	--	--	3.2	.310	--
28...	6.7	485	.66	2.88	.06	--	--	.000
JUN								
24...	5.8	685	.93	1.07	.03	--	--	.000
JUL								
29...	4.1	1140	1.55	.04	.10	--	--	.010
AUG								
27...	7.3	864	1.18	.02	.08	--	--	.000

DATE	TIME	PHOS-PHORUS, TOTAL IN BOT. MAT. (MG/KG AS P)	ALUMI-NUM, TOTAL (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ALUM-INUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)
DEC												
10...	1515	--	400	0	--	--	--	--	90	--	--	--
FEB												
20...	1330	--	530	10	--	1	1	--	70	1	<1	--
APR												
01...	1550	--	--	--	--	--	--	--	80	--	--	--
15...	1515	--	--	30	--	36	1	--	70	2	--	--
16...	1545	--	13000	--	--	20	--	--	--	1	--	--
16...	1555	--	17000	--	--	15	--	--	--	0	--	--
20...	1730	--	11000	30	--	23	1	--	70	1	3	--
21...	1545	--	8400	--	--	14	--	--	--	1	--	--
22...	1415	--	15000	--	--	16	--	--	--	1	--	--
25...	1245	--	2500	--	--	3	--	--	--	1	--	--
MAY												
01...	1140	--	2400	--	--	4	--	--	--	0	--	--
28...	1525	--	--	--	--	--	--	--	90	--	--	--
JUN												
24...	1455	--	--	--	--	--	--	--	120	--	--	--
26...	0800	840	--	--	3100	--	--	7	--	--	--	1
26...	0830	560	--	--	2700	--	--	5	--	--	--	1
26...	0900	730	--	--	4300	--	--	11	--	--	--	2
26...	0930	750	--	--	2300	--	--	6	--	--	--	1
26...	1000	740	--	--	2100	--	--	10	--	--	--	1
26...	1030	680	--	--	5800	--	--	10	--	--	--	1
JUL												
29...	1345	--	--	--	--	--	--	--	110	--	--	--
AUG												
27...	1610	--	550	10	--	--	--	--	100	--	--	--

BEST DOCUMENT AVAILABLE

09244464 HUBBERSON GULCH NEAR HAYDEN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHROMIUM, TOTAL (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, TOTAL (UG/L AS CO)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
DEC												
10...	--	--	--	--	--	--	--	1400	20	--	6	3
FEB												
20...	--	--	--	--	11	3	--	2000	430	--	21	3
APR												
01...	--	--	--	--	--	--	--	1700	<10	--	--	--
15...	4	--	43	--	250	2	--	190000	--	--	170	0
16...	1	--	36	--	110	--	--	90000	--	--	81	--
16...	2	--	17	--	42	--	--	100000	--	--	36	--
20...	30	--	14	--	120	10	--	9600	130	--	98	2
21...	2	--	25	--	48	--	--	66000	--	--	51	--
22...	1	--	29	--	100	--	--	74000	--	--	55	--
25...	8	--	2	--	13	--	--	10000	--	--	11	--
MAY												
01...	1	--	5	--	11	--	--	9600	--	--	8	--
28...	--	--	--	--	--	--	--	860	40	--	--	--
JUN												
24...	--	--	--	--	--	--	--	380	20	--	--	--
26...	--	5	--	10	--	--	11	--	--	3500	--	--
26...	--	5	--	10	--	--	11	--	--	5600	--	--
26...	--	6	--	10	--	--	17	--	--	9000	--	--
26...	--	5	--	10	--	--	15	--	--	3100	--	--
26...	--	8	--	10	--	--	13	--	--	5100	--	--
26...	--	7	--	10	--	--	9	--	--	4400	--	--
JUL												
29...	--	--	--	--	--	--	--	1200	<10	--	--	--
AUG												
27...	--	--	--	--	--	--	--	1700	50	--	6	0

DATE	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE, TOTAL (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	MOLYBDENUM, TOTAL (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)
DEC											
10...	--	730	760	--	--	--	--	--	--	--	--
FEB											
20...	--	230	220	--	.0	.0	--	1	<10	4	0
APR											
01...	--	210	170	--	--	--	--	--	--	--	--
15...	--	3300	--	--	.4	.0	--	3	--	200	2
16...	--	1800	--	--	.2	--	--	1	--	80	--
16...	--	2000	--	--	.2	--	--	1	--	120	--
20...	--	1900	30	--	.2	.0	--	1	0	86	0
21...	--	1200	--	--	.2	--	--	1	--	53	--
22...	--	1200	--	--	.2	--	--	1	--	63	--
25...	--	160	--	--	.2	--	--	0	--	12	--
MAY											
01...	--	170	--	--	.1	--	--	0	--	13	--
28...	--	60	40	--	--	--	--	--	--	--	--
JUN											
24...	--	60	50	--	--	--	--	--	--	--	--
26...	10	--	--	290	--	--	.03	--	--	--	--
26...	10	--	--	430	--	--	.04	--	--	--	--
26...	20	--	--	140	--	--	.04	--	--	--	--
26...	10	--	--	420	--	--	.02	--	--	--	--
26...	20	--	--	200	--	--	.02	--	--	--	--
26...	20	--	--	200	--	--	.01	--	--	--	--
JUL											
29...	--	410	310	--	--	--	--	--	--	--	--
AUG											
27...	--	240	180	--	--	--	--	--	--	--	--

BEST DOCUMENT AVAILABLE

09244464 HUBBERSON GULCH NEAR HAYDEN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	ZINC, TOTAL (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INOR-GANIC, TOT IN BOT MAT (G/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)
DEC											
10...	--	--	--	0	8	--	31	11	--	--	--
FEB											
20...	1	1	--	30	10	--	15	16	--	--	--
APR											
01...	--	--	--	--	--	--	--	--	--	--	--
15...	3	1	--	890	--	--	95	11	--	--	--
16...	4	--	--	490	--	--	--	--	--	--	--
16...	3	--	--	570	--	--	--	--	--	--	--
20...	2	0	--	520	10	--	86	55	--	--	--
21...	2	--	--	320	--	--	--	--	--	--	--
22...	2	--	--	370	--	--	--	--	--	--	--
25...	1	--	--	70	--	--	--	--	--	--	--
MAY											
01...	1	--	--	50	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--
JUN											
24...	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	0	--	--	23	--	--	35	.0	35
26...	--	--	0	--	--	36	--	--	32	.0	32
26...	--	--	1	--	--	40	--	--	14	4.5	18
26...	--	--	0	--	--	30	--	--	42	.0	42
26...	--	--	1	--	--	25	--	--	18	.0	18
26...	--	--	1	--	--	22	--	--	28	.0	28
JUL											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
27...	--	--	--	30	9	--	11	12	--	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	---	1410	---	967	---	536	797	1070	1430	1450
2		---	---	1400	---	988	---	566	794	1000	1450	1490
3		---	---	1390	---	977	1490	560	807	1060	1460	1490
4		---	---	1360	---	956	1480	567	804	1110	1500	1570
5		---	---	1390	---	954	1360	565	812	1100	1510	1620
6		1350	---	1420	---	1240	1200	551	817	1130	1530	1610
7		1350	---	1440	---	1300	1340	549	824	1180	---	1650
8		1300	---	1500	---	1310	1420	564	829	1010	---	1480
9		1300	---	1500	---	1280	1310	576	849	1100	---	1300
10		1280	---	1380	---	1290	1240	592	866	1140	---	1330
11		1260	---	1310	---	1300	1330	590	893	1140	---	1240
12		1260	---	1370	---	1320	1310	591	899	1130	---	1280
13		1270	---	1350	1320	---	1270	631	911	1170	---	---
14		1280	---	1310	1250	---	1080	658	950	1110	---	---
15		1290	1450	1310	1210	---	855	678	1000	1130	---	1610
16		1360	1460	1330	1210	---	781	695	1000	1140	---	1650
17		---	1460	1310	1160	---	652	669	1020	1180	---	1670
18		---	1440	1330	1150	---	621	715	1010	1210	---	1760
19		1600	1430	1280	1130	---	547	728	1020	1230	---	1720
20		1670	1420	1260	1090	---	342	737	1030	1290	---	1880
21		1660	1430	---	1010	---	445	749	1030	1330	---	1610
22		1620	1400	---	1090	---	513	761	1060	1340	---	1710
23		1660	1390	---	1090	---	---	750	1060	1370	---	1680
24		1690	1350	---	1080	---	---	749	1050	1390	---	1630
25		1620	1410	---	1090	---	486	753	1060	1390	---	1640
26		---	1410	---	1080	---	541	771	1090	1410	---	1620
27		---	1410	---	1060	---	538	772	1080	1470	1200	1620
28		---	1410	---	1010	---	544	718	1090	1500	1350	1670
29		---	1380	---	958	---	526	788	1090	1530	1450	1700
30		---	1380	---	---	---	496	782	1070	---	1510	1680
31		---	1400	---	---	---	---	790	---	---	1510	---

09244464 HUBBERSON GULCH NEAR HAYDEN, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1					---	---	2.0	.5	---	---	2.5	.5
2					---	---	1.5	.5	---	---	2.0	.5
3					---	---	1.5	.0	---	---	2.5	1.0
4					---	---	2.0	.5	---	---	2.5	.5
5					---	---	2.0	.5	---	---	3.5	1.0
6					---	---	1.0	.0	---	---	1.0	.0
7					---	---	1.5	.5	---	---	1.0	.0
8					---	---	.5	.0	---	---	2.5	.0
9					---	---	2.0	.5	---	---	2.0	.0
10					---	---	1.5	.0	---	---	2.5	.0
11					---	---	.5	.0	---	---	2.0	.0
12					---	---	.5	.5	---	---	.5	.0
13					---	---	1.5	.5	1.5	.5	---	---
14					---	---	1.0	.0	2.0	.5	---	---
15					2.5	.5	1.5	.0	2.0	.0	---	---
16					3.0	.5	1.5	.5	1.5	.0	---	---
17					2.5	.5	2.0	.5	1.0	.0	---	---
18					2.5	.0	1.5	.5	1.5	.0	---	---
19					2.0	.0	1.0	.5	1.5	.0	---	---
20					2.0	.5	1.5	.0	1.5	.0	---	---
21					2.0	.5	---	---	2.5	.0	---	---
22					1.5	1.0	---	---	2.0	.5	---	---
23					2.5	.0	---	---	2.0	.0	---	---
24					2.0	.0	---	---	3.0	.5	---	---
25					3.0	.0	---	---	5.5	.5	---	---
26					2.0	.5	---	---	2.0	.5	---	---
27					2.0	.5	---	---	2.5	.5	---	---
28					3.0	.0	---	---	2.5	.0	---	---
29					1.5	.0	---	---	2.0	1.0	---	---
30					1.5	.0	---	---	---	---	---	---
31					1.5	.0	---	---	---	---	---	---

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	9.0	3.5	17.0	6.5	25.5	11.0	26.5	11.5	19.5	4.0
2	---	---	13.0	2.5	19.0	6.5	20.0	9.5	25.0	7.0	20.0	5.0
3	4.0	.5	12.5	3.5	20.5	7.0	24.5	8.5	23.0	6.5	20.0	6.0
4	5.0	.5	13.5	3.5	21.5	7.5	26.5	10.0	22.5	6.0	20.5	6.0
5	4.5	.5	16.0	5.5	21.5	8.0	26.5	8.5	21.5	7.0	20.5	5.5
6	3.5	.5	13.5	6.5	21.5	8.0	27.0	8.5	22.0	6.5	20.5	7.0
7	1.0	.0	12.5	7.0	22.0	7.5	23.5	11.5	---	---	17.0	9.0
8	2.5	.0	14.0	6.5	22.5	8.0	25.0	10.5	---	---	13.5	7.0
9	5.0	.0	14.0	6.5	23.5	8.5	27.0	9.5	---	---	17.5	7.5
10	3.0	1.0	16.5	6.5	23.5	9.0	24.0	6.5	---	---	18.0	7.0
11	5.5	.5	12.5	7.0	24.5	9.5	27.5	14.0	---	---	14.5	4.5
12	5.5	.0	8.5	4.5	23.5	8.5	27.5	10.5	---	---	8.5	8.0
13	5.5	.0	9.5	4.0	23.5	8.0	22.5	11.0	---	---	---	---
14	6.0	.5	12.0	3.5	22.5	7.5	24.0	8.0	---	---	---	---
15	4.0	.5	15.0	5.5	22.0	7.5	26.5	6.5	---	---	19.0	10.5
16	6.0	.0	13.0	6.0	22.5	7.0	28.0	9.0	---	---	19.0	9.0
17	5.5	.0	11.0	5.0	25.0	6.5	27.5	10.0	---	---	19.0	6.0
18	6.0	.0	17.5	4.5	23.5	9.5	27.0	12.5	---	---	21.0	9.5
19	6.5	.0	15.0	6.0	22.0	10.5	24.5	12.0	---	---	16.5	9.5
20	6.5	.5	19.5	7.0	23.0	8.5	27.0	8.0	---	---	20.5	7.5
21	6.0	.5	21.0	8.0	23.5	9.5	28.0	9.5	---	---	17.5	6.0
22	8.5	1.0	20.0	9.0	25.5	9.0	28.0	9.0	---	---	17.0	3.5
23	---	---	20.5	9.5	22.5	8.5	26.5	11.5	---	---	17.0	3.0
24	---	---	19.0	7.5	25.5	8.5	27.0	6.5	---	---	17.5	4.0
25	13.0	3.0	15.0	5.0	26.0	7.5	27.0	8.5	---	---	17.5	3.5
26	13.0	1.0	15.0	4.5	26.0	10.0	26.5	6.5	---	---	18.0	3.5
27	14.5	1.5	17.0	5.5	23.5	10.0	26.5	6.0	---	---	17.5	4.5
28	12.0	2.0	19.5	6.5	25.5	7.5	28.0	8.5	21.5	7.0	17.0	4.5
29	14.0	3.5	16.0	7.0	24.5	8.5	25.5	8.5	19.0	8.5	18.0	5.5
30	8.5	5.0	20.0	6.5	22.0	12.5	---	---	19.5	5.0	18.5	4.5
31	---	---	17.5	7.0	---	---	---	---	17.5	5.5	---	---

09244470 STORES GULCH NEAR HAYDEN, CO

LOCATION.--Lat 40°28'06", long 107°14'47", in NW¼NE¼ sec.22, T.6 N., R.88 W., Routt County, Hydrologic Unit 14050001, on right bank at Routt County Highway 53 crossing and 2 mi (3.2 km) south of Hayden.

DRAINAGE AREA.--13.6 mi² (35.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,375 ft (1,943 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 440 ft³/s (12.5 m³/s) Apr. 20, 1980, gage height, 6.85 ft (2.088 m); maximum gage height, 8.64 ft (2.633 m) sometime during period Apr. 14-20, 1979 (backwater from debris); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 440 ft³/s (12.5 m³/s) at 2100 Apr. 20, gage height, 6.85 ft (2.088 m); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.02	2.8	5.3	.03	.00	.00	.00
2	.00	.00	.00	.00	.00	.01	3.0	3.1	.01	.00	.00	.00
3	.00	.00	.00	.00	.00	.01	3.2	2.4	.01	.00	.00	.00
4	.00	.00	.00	.00	.00	.01	3.4	2.3	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.01	3.6	1.9	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.01	3.8	1.7	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.01	4.0	8.1	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.01	4.1	7.0	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.01	4.7	3.0	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.50	4.6	2.0	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.40	8.2	3.2	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.20	20	14	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.10	27	9.7	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.10	33	2.9	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.10	45	1.9	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.10	70	1.5	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.10	94	7.5	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.10	107	2.9	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.10	129	1.5	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.30	164	.94	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.50	176	.68	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.80	148	.54	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	1.0	99	.45	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	1.2	63	.36	.00	.00	.00	.00
25	.00	.00	.00	.00	.02	1.4	22	.27	.00	.00	.00	.00
26	.00	.00	.00	.00	.04	1.6	9.8	.20	.00	.00	.00	.00
27	.00	.00	.00	.00	.06	1.8	6.9	.16	.00	.00	.00	.00
28	.00	.00	.00	.00	.06	2.0	5.6	.09	.00	.00	.00	.00
29	.00	.00	.00	.00	.02	2.2	5.1	.05	.00	.00	.00	.00
30	.00	.00	.00	.00	---	2.4	6.4	.04	.00	.00	.00	.00
31	.00	---	.00	.00	---	2.6	---	.04	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.18	19.70	1256.2	85.72	.05	.00	.00	.00
MEAN	.000	.000	.000	.000	.006	.64	41.9	2.77	.002	.000	.000	.000
MAX	.00	.00	.00	.00	.06	2.6	176	14	.03	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.01	2.8	.04	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.4	39	2490	170	.10	.00	.00	.00

CAL YR 1979 TOTAL 951.60 MEAN 2.61 MAX 150 MIN .00 AC-FT 1890
WTR YR 1980 TOTAL 1361.85 MEAN 3.72 MAX 176 MIN .00 AC-FT 2700

NOTE.--NO GAGE-HEIGHT RECORD FEB. 25 TO APR. 7.

09244470 STOKES GULCH NEAR HAYDEN, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1976. Pumping sediment sampler since October 1976.

REMARKS.--Flow occurred only on days shown.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 10,100 micromhos May 24, 1978; minimum, 395 micromhos Apr. 21, 1980.
WATER TEMPERATURES: Maximum, 26.0°C May 15, 1978; minimum, 0.0°C Apr. 10-20, 1980.
SEDIMENT CONCENTRATIONS: Maximum daily, 13,000 mg/L May 8, 1980; no flow many days during each year.
SEDIMENT LOADS: Maximum daily, 753 tons (683 t) Apr. 21, 1980; no flow many days during each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 8,990 micromhos June 3; minimum, 395 micromhos Apr. 21.
WATER TEMPERATURES: Maximum, 23.5°C May 27; minimum, 0.0°C Apr. 10-20.
SEDIMENT CONCENTRATIONS: Maximum daily, 13,000 mg/L May 8; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 753 tons (683 t) Apr. 21; no flow many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO
APR											
08...	1445	5.1	6600	--	.5	--	--	--	--	--	--
15...	1310	73	2100	--	2.5	--	--	--	--	--	--
15...	1425	48	2600	7.8	1.0	820	660	97	140	300	4.6
17...	1810	117	--	--	--	--	--	--	--	--	--
20...	1910	419	980	7.6	5.5	310	210	50	44	100	2.5
20...	1930	320	960	7.6	--	--	--	--	--	--	--
20...	2100	444	820	7.6	--	--	--	--	--	--	--
25...	1400	16	1650	--	12.0	--	--	--	--	--	--
MAY											
01...	1150	4.9	3400	--	11.5	--	--	--	--	--	--
28...	1430	.05	7400	8.7	22.0	3000	2700	220	590	1000	8.0

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)6	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHOPHOSPHATE DISSOL. (MG/L AS P)
APR										
08...	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--
15...	6.3	160	1100	36	.2	7.5	1820	2.48	7.3	.220
17...	--	--	--	--	--	--	--	--	--	--
20...	4.7	100	390	15	.3	9.7	657	.89	5.1	.070
20...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--
MAY										
01...	--	--	--	--	--	--	--	--	--	--
28...	8.6	280	3900	160	.2	.4	6130	8.34	19	.010

09244470 STOKES GULCH NEAR HAYDEN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, TOTAL (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ALUMINUM, RECOV. FM BOTTOM MATERIAL (UG/G)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)
APR											
08...	1445	880	--	--	2	--	--	--	0	--	--
15...	1310	6500	--	--	3	--	--	--	0	--	--
15...	1425	6100	70	--	3	1	--	70	1	0	--
17...	1810	9400	--	--	3	--	--	--	1	--	--
20...	1910	10000	60	--	8	4	--	90	1	0	--
20...	1930	10000	--	--	8	--	--	--	3	--	--
20...	2100	11000	--	--	9	--	--	--	2	--	--
25...	1400	6500	--	--	3	--	--	--	1	--	--
MAY											
01...	1150	1400	--	--	3	--	--	--	0	--	--
28...	1430	--	--	--	--	--	--	580	--	--	--
JUN											
25...	0800	--	--	3300	--	--	8	--	--	--	1
25...	0900	--	--	4000	--	--	8	--	--	--	1
25...	1000	--	--	2600	--	--	7	--	--	--	1
25...	1100	--	--	5700	--	--	9	--	--	--	2
25...	1200	--	--	6100	--	--	10	--	--	--	2
25...	1300	--	--	3800	--	--	9	--	--	--	2

DATE	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, TOTAL (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, TOTAL (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, TOTAL (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)
APR											
08...	--	--	9	--	--	800	--	--	0	--	--
15...	--	--	14	--	--	9300	--	--	7	--	--
15...	--	--	13	5	--	10000	70	--	10	0	--
17...	--	--	18	--	--	13000	--	--	10	--	--
20...	--	--	37	3	--	41000	40	--	35	0	--
20...	--	--	27	--	--	37000	--	--	32	--	--
20...	--	--	40	--	--	49000	--	--	39	--	--
25...	--	--	16	--	--	13000	--	--	14	--	--
MAY											
01...	--	--	6	--	--	1200	--	--	2	--	--
28...	--	--	--	--	--	490	50	--	--	--	--
JUN											
25...	5	10	--	--	11	--	--	2900	--	--	10
25...	5	10	--	--	11	--	--	2900	--	--	20
25...	4	10	--	--	9	--	--	2200	--	--	10
25...	7	10	--	--	17	--	--	5400	--	--	20
25...	10	10	--	--	17	--	--	3700	--	--	20
25...	5	10	--	--	7	--	--	2800	--	--	10

DATE	MANGANESE, TOTAL (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY TOTAL (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	MOLYBDENUM, TOTAL (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)
APR										
08...	40	--	--	.0	--	--	6	--	11	--
15...	160	--	--	.1	--	--	3	--	14	--
15...	170	20	--	.0	.0	--	4	2	17	0
17...	200	--	--	.1	--	--	3	--	20	--
20...	570	10	--	.1	.0	--	3	1	42	4
20...	500	--	--	.1	--	--	4	--	33	--
20...	620	--	--	.1	--	--	--	--	47	--
25...	160	--	--	.0	--	--	3	--	15	--
MAY										
01...	40	--	--	.1	--	--	4	--	10	--
28...	30	20	--	--	--	--	--	--	--	--
JUN										
25...	--	--	210	--	--	.02	--	--	--	--
25...	--	--	260	--	--	.02	--	--	--	--
25...	--	--	280	--	--	.02	--	--	--	--
25...	--	--	200	--	--	.03	--	--	--	--
25...	--	--	200	--	--	.02	--	--	--	--
25...	--	--	190	--	--	.02	--	--	--	--

09244470 STOKES GULCH NEAR HAYDEN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SELENIUM, TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC, TOTAL (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON, INORGANIC, TOT IN BOT MAT (G/KG AS C)
APR										
08...	200	--	--	40	--	--	--	--	--	--
15...	57	--	--	60	--	--	--	--	--	--
15...	67	66	--	50	10	--	24	19	--	--
17...	52	--	--	80	--	--	--	--	--	--
20...	27	24	--	220	10	--	32	15	--	--
20...	28	--	--	200	--	--	--	--	--	--
20...	24	--	--	270	--	--	--	--	--	--
25...	26	--	--	70	--	--	--	--	--	--
MAY										
01...	79	--	--	30	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--
JUN										
25...	--	--	1	--	--	20	--	--	19	.0
25...	--	--	1	--	--	18	--	--	15	.2
25...	--	--	3	--	--	14	--	--	15	.0
25...	--	--	9	--	--	30	--	--	14	3.3
25...	--	--	1	--	--	23	--	--	12	1.0
25...	--	--	2	--	--	13	--	--	22	.1

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
APR					
16...	1325	--	441	--	--
16...	1520	--	648	--	--
17...	1810	117	548	173	93
17...	1915	--	548	--	--
20...	1909	--	1790	--	--
20...	1910	419	1790	2030	92
20...	1930	320	1590	1370	--
APR					
20...	2100	444	1900	2280	--
25...	1355	--	349	--	--
25...	1400	16	257	11	98
MAY					
01...	1150	4.9	59	.78	--

BEST DOCUMENT AVAILABLE

09244470 STOKES GULCH NEAR HAYDEN, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	3340	8460			
2							---	3820	8710			
3							---	4200	8880			
4							---	4580	---			
5							---	5000	---			
6							---	5270	---			
7							---	5230	---			
8							---	2660	---			
9							---	3260	---			
10							6000	4520	---			
11							6500	4970	---			
12							4600	3100	---			
13							4000	2990	---			
14							---	3280	---			
15							---	4090	---			
16							2040	5090	---			
17							1640	4770	---			
18							1350	3470	---			
19							1070	3710	---			
20							924	4050	---			
21							799	4580	---			
22							792	5110	---			
23							865	5600	---			
24							1140	5960	---			
25							1540	6240	---			
26							2210	6330	---			
27							2360	6230	---			
28							2850	7110	---			
29							3280	7850	---			
30							3260	8050	---			
31							---	8280	---			

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	13.5	11.5	18.0	12.0						
2	---	---	15.5	10.5	20.5	12.0						
3	---	---	16.0	12.5	22.0	13.0						
4	---	---	16.5	12.5	---	---						
5	---	---	19.0	7.5	---	---						
6	---	---	18.5	16.0	---	---						
7	---	---	17.5	8.0	---	---						
8	---	---	15.0	11.5	---	---						
9	---	---	14.5	12.5	---	---						
10	.5	.0	16.0	12.5	---	---						
11	1.0	.0	16.0	13.5	---	---						
12	1.0	.0	13.5	9.5	---	---						
13	1.5	.0	12.0	8.0	---	---						
14	1.5	.0	14.0	10.0	---	---						
15	1.5	.0	15.5	12.0	---	---						
16	2.0	.0	15.5	13.0	---	---						
17	3.0	.0	15.0	11.5	---	---						
18	4.5	.0	16.0	10.5	---	---						
19	6.0	.0	18.5	14.0	---	---						
20	7.5	.0	20.5	16.0	---	---						
21	9.5	.5	23.0	17.5	---	---						
22	11.0	2.5	23.5	19.0	---	---						
23	11.5	5.0	22.5	19.5	---	---						
24	11.0	7.0	21.5	18.5	---	---						
25	15.0	7.5	---	---	---	---						
26	16.0	9.5	---	---	---	---						
27	17.0	12.0	---	---	---	---						
28	17.5	12.5	---	---	---	---						
29	17.0	13.0	19.5	13.5	---	---						
30	16.0	13.0	19.0	11.0	---	---						
31	---	---	19.5	12.5	---	---						

09244470 STOKES GULCH NEAR HAYDEN, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.00			.00		---	.02		.00
2	.00			.00		---	.01		.00
3	.00			.00		---	.01		.00
4	.00			.00		---	.01		.00
5	.00			.00		---	.01		.00
6	.00			.00		---	.01		.00
7	.00			.00		---	.01		.00
8	.00			.00		---	.01		.00
9	.00			.00		---	.01		.00
10	.00			.00		---	.50		.10
11	.00			.00		---	.40		.05
12	.00			.00		---	.20		.05
13	.00			.00		---	.10		.01
14	.00			.00		---	.10		.01
15	.00			.00		---	.10		.01
16	.00			.00		---	.10		.01
17	.00			.00		---	.10		.01
18	.00			.00		---	.10		.01
19	.00			.00		---	.10		.01
20	.00			.00		---	.30		.05
21	.00			.00		---	.50		.10
22	.00			.00		---	.80		.15
23	.00			.00		---	1.0		.20
24	.00			.00		---	1.2		.20
25	.00			.02		.00	1.4		.30
26	.00			.04		.00	1.6		.30
27	.00			.06		.01	1.8		.30
28	.00			.04		.00	2.0		.40
29	.00			.02		.00	2.2		.40
30	.00			---			2.4		.40
31	.00			---			2.6		.50

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	2.8	---	.50	5.3	70	.96	.03	18	.00
2	3.0	---	.60	3.1	29	.24	.01	20	.00
3	3.2	---	.60	2.4	21	.14	.01	16	.00
4	3.4	---	.60	2.3	14	.09	.00	---	---
5	3.6	---	.70	1.9	8	.04	.00	---	---
6	3.8	---	.70	1.7	9	.04	.00	---	---
7	4.0	---	.70	8.1	3090	351	.00	---	---
8	4.1	27	.30	7.0	13000	308	.00	---	---
9	4.7	---	.80	3.0	195	1.6	.00	---	---
10	4.6	58	.70	2.0	81	.44	.00	---	---
11	8.2	88	2.0	3.2	116	1.5	.00	---	---
12	20	121	6.3	14	840	28	.00	---	---
13	27	125	8.1	9.7	317	10	.00	---	---
14	33	---	16	2.9	126	1.0	.00	---	---
15	45	273	35	1.9	78	.41	.00	---	---
16	70	425	87	1.5	52	.22	.00	---	---
17	94	420	115	7.5	147	3.6	.00	---	---
18	107	515	180	2.9	120	1.1	.00	---	---
19	129	664	280	1.5	118	.50	.00	---	---
20	164	1170	706	.94	17	.04	.00	---	---
21	176	1280	753	.68	13	.02	.00	---	---
22	148	1210	600	.54	12	.02	.00	---	---
23	99	1460	473	.45	20	.02	.00	---	---
24	43	---	150	.36	21	.02	.00	---	---
25	22	703	47	.27	25	.02	.00	---	---
26	9.8	347	9.2	.20	29	.02	.00	---	---
27	6.9	209	3.9	.16	24	.01	.00	---	---
28	5.6	99	1.6	.09	23	.01	.00	---	---
29	5.1	64	.88	.05	18	.00	.00	---	---
30	6.4	69	1.2	.04	22	.00	.00	---	---
31	---	---	---	.04	22	.00	---	---	---
YEAR	1361.85		4194.02						

BEST DOCUMENT AVAILABLE

09245000 ELKHEAD CREEK NEAR ELKHEAD, CO

LOCATION.--Lat 40°40'11", long 107°17'04", in NW¼NE¼ sec.8, T.8 N., R.88 W., Routt County, Hydrologic Unit 14050001, on right bank 0.2 mi (0.3 km) upstream from North Fork Elkhead Creek, 4.5 mi (7.2 km) northwest of Elkhead, and 12 mi (19 km) north of Hayden.

DRAINAGE AREA.--64.2 mi² (166.3 km²).

PERIOD OF RECORD.--January to November 1910 and May to November 1920 (monthly discharge only, published in WSP 1313; published as "at Hayes Ranch"), April 1953 to current year.

REVISED RECORDS.--WSP 1733: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,845 ft (2,086 m), from topographic map. Prior to Nov. 30, 1920, nonrecording gage or water-stage recorder 675 ft (210 m) upstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years (water years 1954-80), 54.4 ft³/s (1.541 m³/s), 39,410 acre-ft/yr (48.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,870 ft³/s (53.0 m³/s) May 17, 1978, gage height, 7.07 ft (2.155 m); maximum daily discharge, 1,660 ft³/s (47.0 m³/s) May 22, 1920; no flow Sept. 1, 1954, Sept. 12-19, 24, 1955, Aug. 27-29, 1961, Aug. 14-19, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft³/s (23 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 11	2100	1,160	32.9	6.11	1.862	May 22	2300	*1,240	35.1	6.26	1.908

Minimum daily discharge, 1.8 ft³/s (0.051 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	4.6	5.6	4.7	3.7	4.5	5.7	440	333	20	5.1	3.4
2	1.9	4.7	5.6	4.8	3.9	4.7	5.6	432	305	19	5.0	3.1
3	2.1	5.4	5.7	5.0	4.1	4.6	5.5	496	283	20	4.4	3.0
4	2.4	5.2	5.8	4.8	4.2	4.8	5.4	500	280	19	4.1	2.9
5	2.6	4.8	5.9	4.8	4.4	4.9	5.3	532	277	17	4.0	2.7
6	2.6	5.0	6.2	4.7	4.4	5.0	5.3	715	261	15	4.0	2.6
7	2.7	5.5	6.0	4.5	4.5	5.1	5.4	810	236	14	3.8	2.5
8	2.7	5.1	6.0	4.4	4.5	5.1	5.4	866	214	14	3.8	2.4
9	2.8	5.4	5.8	4.3	4.3	5.2	5.5	926	199	13	3.6	3.0
10	2.9	5.8	5.8	4.3	4.2	5.2	5.4	896	185	12	3.4	4.4
11	2.9	5.1	5.7	4.1	4.2	5.4	5.4	974	170	12	3.3	4.8
12	3.1	4.7	5.6	4.2	4.1	5.6	5.5	715	159	11	3.1	5.1
13	3.0	4.8	5.6	4.2	4.1	5.6	5.6	516	140	10	3.0	6.0
14	3.1	5.2	5.8	4.0	4.1	5.7	5.9	488	119	10	2.9	5.1
15	3.2	5.0	6.0	4.3	4.1	5.8	6.4	532	102	9.8	5.4	4.1
16	3.3	5.3	5.9	3.9	4.2	5.8	6.8	575	89	9.3	8.7	3.8
17	3.7	5.3	5.7	3.8	4.1	5.9	13	620	79	8.8	5.4	3.6
18	4.4	4.9	5.7	3.8	4.3	6.2	16	500	68	8.6	4.5	3.3
19	4.4	4.6	5.8	3.7	4.4	6.0	19	615	62	8.2	3.9	3.1
20	5.4	4.6	5.8	3.8	4.6	6.2	22	710	57	7.8	3.7	3.0
21	7.6	4.8	5.9	3.6	4.6	6.3	26	810	51	7.4	4.0	3.3
22	5.9	5.0	6.0	3.5	4.5	6.4	37	932	46	7.0	3.6	3.7
23	4.8	5.3	5.7	3.4	4.5	6.5	98	963	42	6.9	3.7	3.6
24	4.9	5.7	5.4	3.5	4.4	6.5	210	759	39	6.5	6.4	3.3
25	5.1	5.9	5.2	3.5	4.5	6.6	245	579	36	6.4	5.8	3.2
26	5.2	6.0	5.0	3.5	4.5	6.6	276	463	33	6.0	6.0	3.1
27	5.3	6.0	4.7	3.5	4.4	6.4	298	443	30	5.9	5.4	2.9
28	5.0	5.8	4.7	3.4	4.4	6.0	344	435	26	5.7	4.5	2.8
29	4.8	5.8	4.8	3.4	4.3	5.6	397	418	24	5.3	3.9	2.5
30	4.8	5.7	4.7	3.5	---	5.4	488	371	21	5.5	3.6	2.5
31	4.7	---	4.7	3.5	---	5.5	---	358	---	5.3	3.5	---
TOTAL	119.1	157.0	172.8	124.4	124.5	175.1	2579.1	19369	3966	326.4	135.5	102.8
MEAN	3.84	5.23	5.57	4.01	4.29	5.65	86.0	625	132	10.5	4.37	3.43
MAX	7.6	6.0	6.2	5.0	4.6	6.6	488	974	333	20	8.7	6.0
MIN	1.8	4.6	4.7	3.4	3.7	4.5	5.3	358	21	5.3	2.9	2.4
AC-FT	236	311	343	247	247	347	5120	38420	7870	647	269	204

CAL YR 1979 TOTAL 29250.1 MEAN 80.1 MAX 1210 MIN 1.3 AC-FT 58020
WTR YR 1980 TOTAL 27351.7 MEAN 74.7 MAX 974 MIN 1.8 AC-FT 54250

09246550 YAMPA RIVER BELOW ELKHEAD CREEK, NEAR CRAIG, CO

LOCATION.--Lat 40°29'50", long 107°30'34", in NW¼NE¼ sec.8, T.6 N., R.90 W., Moffat County, Hydrologic Unit 14050001, 350 ft (107 m) northeast of Craig airport runway, 2.3 mi (3.6 km) east of old State Highways 789 and 394 junction south of Craig, and about 1.5 mi (2.4 km) upstream from mouth of Fortification Creek.

PERIOD OF RECORD.--June 1975 to September 1960 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT											
25...	1120	E220	385	8.0	6.5	10.0	150	35	35	14	23
NOV											
28...	1130	E160	425	8.2	.0	—	170	38	41	16	30
DEC											
20...	1230	E180	400	8.0	.0	—	150	16	37	13	26
FEB											
06...	1545	E160	433	7.6	.0	9.4	160	39	39	15	28
MAR											
19...	1215	E300	614	7.5	.0	10.5	220	93	48	25	48
MAY											
13...	1230	E9900	253	7.4	6.0	8.5	99	36	24	9.4	12
JUN											
19...	1325	E4600	80	6.9	12.5	7.2	32	0	8.6	2.5	3.4
JUL											
18...	1230	E1550	215	7.5	21.0	7.0	79	14	20	7.0	11
SEP											
03...	1310	E380	425	8.1	18.0	8.0	160	37	38	15	26

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT										
25...	.8	2.7	110	66	9.6	.2	6.5	223	.30	E132
NOV										
28...	1.0	2.8	130	94	11	.2	8.1	281	.38	E121
DEC										
20...	.9	2.5	130	58	11	.2	9.4	235	.32	E114
FEB										
06...	1.0	2.2	120	75	9.8	.2	13	255	.35	E110
MAR										
19...	1.4	2.6	130	160	13	.3	12	387	.53	E313
MAY										
13...	.5	1.8	63	50	3.0	.2	9.6	148	.20	E3950
JUN										
19...	.3	.8	34	10	1.1	.2	6.3	53	.07	E658
JUL										
18...	.5	1.5	65	32	3.4	.3	6.2	121	.16	E506
SEP										
03...	.9	2.1	120	84	10	.2	.6	248	.34	E254

E ESTIMATED.

09246550 YAMPA RIVER BELOW ELKHEAD CREEK, NEAR CRAIG, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
OCT										
25...	.00	.010	.45	.46	.46	.030	60	<10	3.9	--
NOV										
28...	.01	.020	.62	.64	.65	.010	70	90	11	11
DEC										
20...	.32	.030	.84	.87	1.2	.010	50	50	--	--
FEB										
06...	.58	.220	.56	.78	1.4	.060	60	100	6.4	5.8
MAR										
19...	.87	.170	.64	.81	1.7	.060	60	70	--	11
MAY										
13...	.34	.080	.75	.83	1.2	.160	50	30	12	8.5
JUN										
19...	.03	.010	.47	.48	.51	.070	30	80	6.2	5.4
JUL										
18...	.00	.020	.56	.58	.58	.180	20	80	5.7	4.8
SEP										
03...	.00	.060	.77	.83	.83	.050	70	60	6.2	6.0

DATE	TIME	ALUMINUM, TOTAL (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BERYLLIUM, TOTAL (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM TOTAL (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
MAY									
13...	1230	1100	20	2	5	0	<1	0	<1
SEP									
03...	1310	170	10	2	2	0	<1	0	<1

DATE	CHROMIUM, TOTAL (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL (UG/L AS HG)
MAY									
13...	0	0	8	2	6	0	70	10	.1
SEP									
03...	0	0	15	3	4	0	50	20	.0

DATE	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
MAY								
13...	.0	10	3	1	1	.0	20	5
SEP								
03...	.0	2	2	0	0	1.0	60	<3

09247600 YAMPA RIVER BELOW CRAIG, CO

LOCATION.--Lat 40°29'04", long 107°36'23", in SW¼SE¼ sec.9, T.6 N., R.91 W., Moffat County, Hydrologic Unit 14050001, at State Highways 13 and 789 bridge about 0.5 mi (0.8 km) above the mouth of Johnson Gulch and about 3 mi (4.8 km) southwest of Craig.

PERIOD OF RECORD.--June 1975 to September 1980 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT 25...	1340	231	398	8.5	8.0	14.8	150	35	35	14	26
NOV 28...	1430	166	480	8.5	.0	--	180	40	44	17	40
DEC 20...	1600	188	449	8.3	.0	--	160	28	40	14	31
FEB 11...	1130	168	506	8.0	.0	9.1	170	35	42	17	37
MAR 18...	1730	304	670	7.6	2.0	12.1	220	83	48	25	55
MAY 13...	1630	9990	260	7.4	8.0	8.3	99	33	24	9.5	14
JUN 19...	1525	4600	87	7.0	13.5	7.0	32	8	8.7	2.6	5.0
JUL 18...	1510	1570	230	8.3	24.0	10.0	83	16	21	7.4	13
SEP 03...	1545	380	471	8.5	20.0	11.0	170	52	41	17	34

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT 25...	.9	2.8	110	71	12	.2	6.2	233	.32	145
NOV 28...	1.3	3.0	140	93	11	.3	7.4	300	.41	134
DEC 20...	1.1	2.7	130	70	12	.2	9.3	257	.35	130
FEB 11...	1.2	2.5	140	100	12	.3	13	308	.42	140
MAR 18...	1.6	2.8	140	180	16	.2	10	421	.57	346
MAY 13...	.6	1.9	66	54	3.9	.2	9.7	157	.21	4230
JUN 19...	.4	.8	24	11	1.4	.2	6.4	51	.07	633
JUL 18...	.6	1.5	67	41	3.5	.3	5.6	134	.18	568
SEP 03...	1.1	2.6	120	94	14	.3	.5	276	.38	283

09247600 YAMPA RIVER BELOW CRAIG, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
OCT										
25...	.00	.030	.49	.52	.52	.080	70	20	4.4	--
NOV										
28...	.04	.240	.41	.65	.69	.130	70	110	8.6	8.5
DEC										
20...	.33	.220	.88	1.1	1.4	.110	60	50	--	--
FEB										
11...	.59	.440	.33	.77	1.4	.160	70	80	7.6	5.6
MAR										
18...	.82	.320	.68	1.0	1.8	.140	70	60	--	--
MAY										
13...	.33	.080	.89	.97	1.3	.210	50	20	13	7.8
JUN										
19...	.03	.030	.69	.72	.75	.070	40	80	5.7	5.2
JUL										
1[illegible]...	.00	.000	.43	.43	.43	.030	20	70	5.8	5.4
SEP										
03...	.00	.050	.68	.73	.73	.050	90	60	5.1	6.9

DATE	TIME	ALUMI-NUM, TOTAL (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BERYL-LIUM, TOTAL (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)
MAY									
13...	1630	1700	20	2	1	0	<1	0	<1
SEP									
03...	1545	80	10	2	2	0	<1	0	<1

DATE	CHRO-MIUM, TOTAL (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL (UG/L AS HG)
MAY									
13...	0	0	11	1	7	0	100	9	.1
SEP									
03...	10	0	31	4	6	0	40	10	.0

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAY								
13...	.0	10	3	1	1	1.0	30	<3
SEP								
03...	.0	2	2	0	0	.0	60	3

BEST DOCUMENT AVAILABLE

09249750 WILLIAMS FORK RIVER AT MOUTH, NEAR HAMILTON, CO

LOCATION.--Lat 40°26'14", long 107°38'50", in SE¼NW¼ sec.31, T.6 N., R.91 W., Moffat County, Hydrologic Unit 14050001, at Coal Mine Road crossing about 1,500 ft (457 m) upstream from confluence with Yampa River and about 8 mi (12.9 km) south-southwest of Craig.

PERIOD OF RECORD.--June 1975 to September 1980 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPERATURE, WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO
OCT												
25...	1410	52	510	8.2	9.0	11.2	220	48	46	25	20	.6
NOV												
28...	1515	44	519	8.3	.0	--	230	54	51	26	24	.7
DEC												
21...	1400	47	524	8.2	.0	11.2	220	36	47	24	22	.7
FEB												
11...	1400	40	587	8.1	.0	11.3	260	55	56	28	27	.7
MAR												
19...	1430	63	700	8.2	4.0	12.2	320	120	67	38	31	.8
MAY												
13...	1830	960	329	7.7	6.0	7.7	140	23	34	14	8.2	.3
JUN												
19...	1615	640	183	7.5	13.5	6.9	82	7	21	7.2	4.8	.2
JUL												
18...	1615	120	418	8.2	24.0	6.9	180	25	41	20	14	.4
SEP												
03...	1620	64	497	8.2	20.0	7.4	230	56	46	27	21	.6

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)
OCT												
25...	2.1	170	91	4.1	.2	13	304	.41	42.3	.03	.010	.51
NOV												
28...	1.8	180	91	3.7	.2	14	320	.44	38.1	.08	.016	.41
DEC												
21...	2.0	180	87	3.9	.2	14	308	.42	39.1	.15	.020	.80
FEB												
11...	1.6	200	110	4.7	.2	15	363	.49	39.2	.22	.040	.18
MAR												
19...	2.2	200	160	5.8	.2	13	438	.60	74.5	.17	.040	.96
MAY												
13...	1.7	120	44	2.1	.2	11	187	.25	485	.31	.060	1.5
JUN												
19...	.9	75	19	.9	.2	11	110	.15	190	.03	.030	.64
JUL												
18...	1.7	160	56	2.5	.8	12	244	.33	79.1	.00	.010	.99
SEP												
03...	1.5	170	80	4.0	.2	10	292	.40	50.5	.00	.030	.48

09249750 WILLIAMS FORK RIVER AT MOUTH, NEAR HAMILTON, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	BIOMASS CHLOROPHYLL RATIO PERIPHYTON (UNITS)	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)
OCT 25...	.52	.55	.010	50	20	4.9	5.1	--	--	--	--	--
NOV 28...	.42	.50	.000	40	60	7.8	5.6	--	--	--	--	--
DEC 21...	.82	.97	.020	30	20	--	--	--	--	--	--	--
FEB 11...	.22	.44	.010	50	30	--	7.8	--	--	--	--	--
MAR 19...	1.0	1.2	.010	50	10	--	12	--	--	--	--	--
MAY 13...	1.6	1.9	.460	40	10	20	8.6	--	--	--	--	--
JUN 19...	.67	.70	.150	40	50	11	9.0	--	--	--	--	--
JUL 18...	1.0	1.0	.010	50	30	4.6	4.6	--	--	--	--	--
SEP 03...	.51	.51	.020	60	20	5.2	6.8	21.4	24.7	324	10.2	1.32

DATE	TIME	ALUMINUM, TOTAL (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BERYLLIUM, TOTAL (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM TOTAL (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)
MAY 13...	1830	2700	20	3	1	0	<1	0	<1
SEP 03...	1620	100	0	2	2	0	<1	0	<1

DATE	CHROMIUM, TOTAL (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, TOTAL (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL (UG/L AS HG)
MAY 13...	0	0	15	4	12	0	180	10	.1
SEP 03...	20	0	16	1	4	0	20	9	.0

DATE	MERCURY DISSOLVED (UG/L AS HG)	NICKEL, TOTAL (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, TOTAL (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
MAY 13...	.0	21	3	2	1	1.0	60	<3
SEP 03...	.0	3	1	0	0	2.0	40	<3

09250000 MILK CREEK NEAR THORNBURGH, CO

LOCATION.--Lat 40°11'37", long 107°43'57", in NE¼ sec.32, T.3 N., R.92 W., Rio Blanco County, Hydrologic Unit 14050002, on right bank 2.2 mi (3.5 km) southwest of Thornburgh and 3.0 mi (4.8 km) upstream from Little Creek.

DRAINAGE AREA.--65 mi² (168 km²), approximately.

PERIOD OF RECORD.--October 1952 to current year. Published as "near Thornburg" October 1952 to September 1968.

GAGE.--Water-stage recorder. Datum of gage is 6,599.32 ft (2,011.473 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS.--Records fair except those for period of ice effect, which are poor. Diversion for irrigation of about 1,321 acres (5.35 km²) above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--28 years, 25.1 ft³/s (0.711 m³/s), 18,180 acre-ft/yr (22.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s (29.7 m³/s) May 10, 1974, gage height, 5.03 ft (1.533 m), from rating curve extended above 340 ft³/s (9.63 m³/s); maximum gage height, 5.52 ft (1.682 m) June 1, 1957; minimum daily discharge, 0.20 ft³/s (0.006 m³/s) for several days in 1956, 1963, and 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft³/s (7.1 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 12	0500	*400	11.3	4.85	1.478	May 23	0300	395	11.2	4.84	1.475

Minimum daily discharge, 0.46 ft³/s (0.013 m³/s) Oct. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.46	2.4	2.9	2.8	5.4	8.2	15	166	120	13	3.5	2.3
2	.46	3.3	2.9	2.8	5.6	8.2	15	164	115	30	3.3	2.2
3	.46	3.6	3.0	2.8	5.8	8.1	16	171	110	32	3.2	2.0
4	.60	2.3	3.0	2.9	5.9	8.0	16	224	105	18	3.0	1.7
5	.60	2.4	3.1	2.9	6.0	8.1	17	220	118	15	2.7	1.5
6	.61	2.3	3.1	3.0	6.2	8.2	18	225	108	12	2.4	1.2
7	.61	2.3	3.1	3.1	6.4	8.3	18	266	101	13	2.4	1.1
8	.61	2.4	3.1	3.1	6.6	8.4	19	259	89	13	2.3	1.2
9	.61	2.4	3.0	3.1	6.8	8.6	16	276	85	12	2.1	1.1
10	.62	2.3	3.0	3.2	6.9	8.8	22	271	78	11	1.9	1.3
11	.62	2.2	3.0	3.3	7.0	9.0	17	309	71	9.4	1.8	1.5
12	.62	2.3	2.9	3.4	7.2	9.2	10	327	64	9.2	1.7	1.6
13	.80	2.6	2.9	3.5	7.3	9.4	8.3	239	57	9.0	1.6	1.6
14	1.1	2.5	2.9	3.6	7.5	9.6	15	197	50	10	1.5	1.4
15	.74	2.5	2.9	3.6	7.7	9.9	49	169	43	9.4	1.5	1.4
16	.75	2.1	2.9	3.7	7.9	10	65	159	37	8.9	2.9	1.2
17	.75	1.7	2.8	3.8	7.9	10	66	236	32	8.0	3.0	1.0
18	.94	1.4	2.8	3.9	7.9	11	88	178	30	6.8	2.1	.96
19	1.0	1.5	2.8	3.9	8.0	11	102	168	30	6.5	1.7	.90
20	1.9	1.6	2.8	4.0	8.0	11	107	195	29	5.9	1.4	.96
21	3.8	1.8	2.8	4.1	8.0	11	126	244	26	5.4	1.4	.96
22	2.8	2.0	2.7	4.2	8.1	12	130	300	22	5.0	1.3	.90
23	2.6	2.2	2.7	4.3	8.1	12	115	315	20	4.8	1.6	.96
24	2.7	2.4	2.7	4.4	8.1	12	108	281	17	4.6	2.4	.96
25	2.9	2.5	2.7	4.5	8.1	13	95	203	16	4.5	2.5	.96
26	2.9	2.6	2.7	4.6	8.1	13	105	161	13	4.4	2.8	.96
27	2.7	2.6	2.6	4.7	8.1	13	109	155	13	4.2	3.2	.96
28	2.5	2.7	2.6	4.8	8.1	14	131	164	13	4.0	2.5	.96
29	2.8	2.7	2.6	5.0	8.1	14	162	116	12	3.9	1.9	.96
30	3.0	2.8	2.7	5.1	---	14	180	118	12	3.8	1.6	.96
31	2.5	---	2.7	5.2	---	15	---	120	---	3.6	2.0	---
TOTAL	46.06	70.4	88.4	117.3	210.8	326.0	1960.3	6574	1636	300.3	69.2	37.66
MEAN	1.49	2.35	2.85	3.78	7.27	10.5	65.3	212	54.5	9.69	2.23	1.26
MAX	3.8	3.6	3.1	5.2	8.1	15	180	327	120	32	3.5	2.3
MIN	.46	1.4	2.6	2.8	5.4	8.0	8.3	116	12	3.6	1.3	.90
AC-FT	91	140	175	233	418	647	3890	13040	3250	596	137	75

CAL YR 1979 TOTAL 12590.32 MEAN 34.5 MAX 472 MIN .46 AC-FT 24970
WTR YR 1980 TOTAL 11436.42 MEAN 31.2 MAX 327 MIN .46 AC-FT 22680

NOTE.--NO GAGE-HEIGHT RECORD FEB. 17 TO APR. 8.

BEST DOCUMENT AVAILABLE

09250510 TAYLOR CREEK AT MOUTH, NEAR AXIAL, CO

LOCATION.--Lat 40°18'48", long 107°47'57", in NW¼SW¼ sec.14, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050002, on right bank 475 ft (145 m) upstream from confluence with Wilson Creek, about 1,000 ft (300 m) southwest of Gossard ranch house, and 2 mi (3.2 km) north of Axial. Prior to Mar. 29, 1980, at site 25 ft (8 m) upstream.

DRAINAGE AREA.--7.22 mi² (18.70 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,300 ft (1,920 m), from topographic map. Prior to Mar. 28, 1980, gage 25 ft (8 m) upstream at datum 0.08 ft (0.024 m) higher.

REMARKS.--Records good except for Oct. 1 to Mar. 27, which are poor. No diversions. Low dam to prevent erosion 75 ft (23 m) upstream.

AVERAGE DISCHARGE.--5 years, 0.15 ft³/s (0.004 m³/s), 109 acre-ft/yr (134,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 18 ft³/s (0.51 m³/s) Feb. 19, 1981, gage height, 2.69 ft (0.820 m) result of discharge measurement; no flow most days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 18 ft³/s (0.51 m³/s) at 1500 Feb. 19, gage height, 2.69 ft (0.820 m) result of discharge measurement; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.04	.00	.01	.07	.54	.04	.04	3.4	1.2	.19	.17
2	.06	.04	.00	.01	.06	.50	.03	.04	3.2	1.3	.20	.12
3	.06	.03	.00	.01	.06	.45	.04	.03	3.0	1.1	.20	.11
4	.05	.03	.00	.01	.05	.44	.04	.10	2.8	1.1	.17	.11
5	.05	.03	.00	.01	.06	.40	.05	.19	2.8	.93	.13	.13
6	.05	.02	.00	.01	.06	.39	.02	.26	2.7	.82	.12	.13
7	.05	.02	.00	.01	.07	.38	.01	.34	2.6	.78	.08	.14
8	.05	.01	.00	.01	.08	.35	.01	.49	2.5	.77	.06	.17
9	.05	.01	.00	.01	.08	.33	.01	.88	2.4	.75	.06	.16
10	.05	.00	.00	.02	.08	.33	.04	1.4	2.3	.72	.08	.16
11	.06	.00	.00	.03	.08	.32	.03	2.0	2.2	.71	.10	.13
12	.06	.00	.00	.05	.08	.31	.03	2.4	2.1	.65	.08	.17
13	.06	.00	.00	.10	.20	.31	.03	2.6	2.0	.63	.10	.14
14	.06	.00	.00	.16	.35	.29	.03	3.0	1.9	.57	.14	.10
15	.06	.00	.00	.13	2.0	.28	.04	3.4	1.9	.46	.29	.12
16	.06	.00	.00	.10	.20	.25	.04	4.1	1.8	.46	.19	.11
17	.06	.00	.00	.07	.20	.22	.04	4.8	1.7	.43	.16	.09
18	.08	.00	.00	.06	10	.18	.06	4.4	1.6	.41	.12	.06
19	.08	.00	.00	.05	18	.15	.06	4.5	1.6	.37	.11	.03
20	.13	.00	.01	.04	.40	.12	.06	4.5	1.6	.35	.10	.07
21	.13	.00	.01	.05	.40	.10	.07	4.5	1.6	.33	.03	.08
22	.11	.00	.01	.05	.40	.09	.05	4.6	1.5	.29	.11	.12
23	.11	.00	.01	.06	.90	.08	.06	4.6	1.5	.31	.11	.06
24	.10	.00	.01	.06	.30	.08	.05	4.9	1.4	.31	.22	.03
25	.09	.00	.01	.06	.30	.07	.05	4.9	1.4	.30	.25	.16
26	.07	.00	.01	.06	.90	.06	.04	4.6	1.3	.30	.22	.03
27	.05	.00	.01	.06	.70	.05	.03	4.2	1.3	.27	.15	.21
28	.08	.00	.01	.07	1.0	.04	.04	4.0	1.2	.23	.12	.39
29	.06	.00	.01	.07	.60	.02	.04	3.8	1.2	.19	.14	.05
30	.05	.00	.01	.08	---	.02	.04	3.8	1.1	.23	.11	.03
31	.05	---	.01	.08	---	.01	---	3.5	---	.21	.17	---
TOTAL	2.14	.23	.12	1.60	37.28	7.16	1.18	86.87	59.6	17.48	4.31	3.58
MEAN	.069	.008	.004	.052	1.29	.23	.039	2.80	1.99	.56	.14	.12
MAX	.13	.04	.01	.16	18	.54	.07	4.9	3.4	1.3	.29	.39
MIN	.05	.00	.00	.01	.05	.01	.01	.03	1.1	.19	.03	.03
AC-FT	4.2	.5	.2	3.2	74	14	2.3	172	118	35	8.5	7.1

CAL YR 1979 TOTAL 39.38 MEAN .11 MAX 1.8 MIN .00 AC-FT 78
WTR YR 1980 TOTAL 221.55 MEAN .61 MAX 18 MIN .00 AC-FT 439

NOTE.--NO GAGE-HEIGHT RECORD OCT. 31 TO MAR. 27.

09250510 TAYLOR CREEK AT MOUTH, NEAR AXIAL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1976 to current year.
WATER TEMPERATURES: July 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1976.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,220 micromhos Oct. 29, 1978; minimum, 371 micromhos Apr. 10, 1977.
WATER TEMPERATURES: Maximum, 32.0°C July 11, 1976; minimum, freezing point many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,710 micromhos Nov. 1; minimum not determined.
WATER TEMPERATURES: Maximum, 30.0°C July 22; minimum, 0.0°C several days in April.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV										
08...	1130	.01	1340	8.5	1.0	11.0	610	240	95	90
FEB										
19...	1435	18	255	7.7	.5	8.4	110	24	25	11
MAR										
19...	1155	.15	1220	8.3	6.0	10.6	600	270	97	88
APR										
14...	1200	.06	1400	8.1	16.0	8.6	620	270	90	96
MAY										
05...	1445	.10	1350	--	22.5	--	--	--	--	--
19...	1515	4.2	1010	8.2	14.0	--	500	210	96	64
22...	1315	4.5	975	--	19.5	--	--	--	--	--
JUN										
05...	0910	2.8	1080	8.1	12.0	--	--	--	--	--
25...	1115	1.3	1180	7.9	18.0	--	570	250	82	88
JUL										
30...	0950	.26	1250	8.2	17.5	7.8	570	270	72	95
AUG										
26...	1410	.20	1250	8.2	20.5	9.2	560	250	71	92
SEP										
29...	1430	.04	1420	8.1	18.0	8.2	640	310	75	110

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
NOV										
08...	65	1.1	9.0	370	360	29	.5	12	883	1.2
FEB										
19...	8.5	.4	8.4	84	45	7.6	.2	9.2	167	.23
MAR										
19...	64	1.1	8.2	330	300	32	.6	9.7	799	1.0
APR										
14...	74	1.3	10	350	390	38	.6	10	919	1.2
MAY										
05...	--	--	--	--	--	--	--	--	--	--
19...	32	.6	4.4	290	220	18	.3	14	633	.86
22...	--	--	--	--	--	--	--	--	--	--
JUN										
05...	--	--	--	--	--	--	--	--	--	--
25...	58	1.1	4.9	320	310	32	.4	7.5	780	1.0
JUL										
30...	70	1.3	5.4	300	370	33	.4	.6	827	1.1
AUG										
26...	66	1.2	8.1	310	340	32	.4	3.8	800	1.0
SEP										
29...	76	1.3	11	330	440	30	.4	11	952	1.2

09250510 TAYLOR CREEK AT MOUTH, NEAR AXIAL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV										
08...	.02	.01	--	--	.010	140	370	10	50	30
FEB										
19...	8.3	.34	--	--	.130	280	34000	<40	1100	30
MAR										
19...	.32	.11	--	--	.130	100	23000	<10	890	120
APR										
14...	.15	.05	2.20	.450	.030	140	13000	<10	500	40
MAY										
05...	--	--	3.00	1.10	--	--	31000	--	1000	--
19...	7.1	2.1	1.20	.240	.020	70	6700	<10	250	40
22...	--	--	.70	--	--	--	4300	--	190	--
JUN										
05...	--	--	.62	.070	--	--	1900	--	120	--
25...	2.7	1.0	--	--	.020	60	1400	<10	70	10
JUL										
30...	.58	.14	--	--	.000	100	100	<10	0	<1
AUG										
26...	.43	.00	--	--	.000	120	1100	<10	40	3
SEP										
29...	.10	.00	--	--	.000	120	170	<10	10	4

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)
FEB								
19...	1435	880	180	15	2	3	0	--
APR								
14...	1200	11000	--	3	--	1	--	6
MAY								
05...	1445	27000	--	6	--	1	--	1
19...	1515	2700	30	3	2	0	<1	1
22...	1315	4100	--	2	--	1	-	0
JUN								
05...	0910	1000	--	--	--	1	--	2
AUG								
26...	1410	770	10	--	--	--	--	--
SEP								
29...	1430	80	0	2	2	0	2	--

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)
FEB									
19...	--	30	2	48	0	.2	.0	1	1
APR									
14...	6	15	--	8	--	.0	--	1	--
MAY									
05...	15	50	--	32	--	.1	--	1	--
19...	5	13	3	10	2	.1	.0	0	<10
22...	4	44	--	8	--	.1	--	2	--
JUN									
05...	2	7	--	4	--	--	--	0	--
AUG									
26...	--	--	--	4	0	--	--	--	--
SEP									
29...	--	16	3	4	7	.0	.0	1	1

BEST DOCUMENT AVAILABLE

09250510 TAYLOR CREEK AT MOUTH, NEAR AXIAL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
FEB								
19...	50	2	1	1	250	10	20	16
APR								
14...	13	--	2	--	110	--	--	--
MAY								
05...	40	--	5	--	210	--	--	--
19...	14	6	5	4	60	<3	11	8.3
22...	43	--	2	--	110	-	--	--
JUN								
05...	6	--	--	--	40	--	--	--
AUG								
26...	--	--	--	--	50	<3	--	8.0
SEP								
29...	4	0	2	2	20	3	--	17

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV					
08...	1130	.01	73	.00	--
FEB					
19...	1440	18	3370	164	94
MAR					
19...	1155	.15	1530	.62	97
APR					
14...	1200	.06	762	.12	97
MAY					
05...	1445	.18	2090	1.0	89
19...	1515	4.2	933	11	46
22...	1315	4.5	602	7.3	54
JUN					
05...	0910	2.8	253	1.9	72
25...	1115	1.3	365	1.3	--
25...	1125	1.3	350	1.2	--
JUL					
30...	0950	.26	22	.02	--
30...	1200	.26	23	.02	--
AUG					
26...	1410	.20	122	.07	--
SEP					
29...	1435	.04	8	.00	--

09250510 TAYLOR CREEK AT MOUTH, NEAR AXIAL, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1510				---	1550	---	1040	---	1200	1280
2	---	1530				---	1510	---	1050	---	1200	1280
3	---	---				---	1520	---	1060	---	1200	1280
4	1330	---				---	1460	---	1060	---	1210	1290
5	1330	---				---	---	1260	1050	---	1210	1280
6	1330	---				---	---	978	892	---	1240	1280
7	1340	---				---	---	---	916	---	1250	1270
8	1340	---				---	---	---	969	---	1250	1270
9	1340	---				---	---	---	1020	---	1260	1270
10	1350	---				---	---	---	1080	---	1260	1270
11	1350	---				---	---	---	1100	---	1260	1280
12	1360	---				---	---	---	1120	---	1260	1280
13	1370	---				---	---	---	1120	---	1270	1290
14	1370	---				---	1420	---	1130	1220	1280	1290
15	1380	---				---	---	---	1140	1150	1250	1300
16	1400	---				---	---	---	1150	1120	1260	1300
17	1390	---				---	---	---	1160	1090	1280	1310
18	1390	---				---	---	---	1180	1060	1290	1310
19	1390	---				---	---	---	1200	1060	1290	1310
20	---	---				---	---	---	1220	1070	1300	1320
21	---	---				---	1320	---	1240	1090	1310	1330
22	1240	---				---	1250	986	1250	1100	1320	1330
23	1310	---				---	---	989	1280	1120	1270	1310
24	1330	---				---	---	986	1300	1140	1250	1330
25	1350	---				---	---	989	1270	1160	1250	1350
26	1370	---				---	---	1000	1220	1170	1250	1330
27	1380	---				---	---	1020	1220	1190	1270	1380
28	1390	---				1320	---	1020	1190	1200	1280	1410
29	1340	---				1380	---	1020	1180	1220	1280	1400
30	1370	---				1420	---	1030	1160	1240	1280	1420
31	---	---				1410	---	1030	---	1200	1280	---

09250510 TAYLOR CREEK AT MOUTH, NEAR AXIAL, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---									---	---
2	---	---									---	---
3	---	---									---	---
4	14.0	5.5									---	---
5	14.0	3.5									---	---
6	14.5	4.0									---	---
7	14.5	4.0									---	---
8	14.5	4.5									---	---
9	12.5	4.5									---	---
10	13.0	2.5									---	---
11	15.5	3.5									---	---
12	13.5	1.0									---	---
13	14.5	1.0									---	---
14	13.0	2.5									---	---
15	14.0	2.0									---	---
16	13.0	5.0									---	---
17	12.0	.5									---	---
18	13.5	6.5									---	---
19	13.0	6.5									---	---
20	---	---									---	---
21	---	---									---	---
22	---	---									---	---
23	---	---									---	---
24	---	---									---	---
25	---	---									---	---
26	---	---									---	---
27	---	---									---	---
28	---	---									7.5	.5
29	---	---									9.5	.5
30	---	---									6.0	.5
31	---	---									2.0	.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.0	.0	18.0	7.0	17.5	9.0	---	---	25.5	15.5	21.0	7.5
2	4.0	.5	21.0	3.5	17.5	8.5	---	---	26.0	15.0	21.5	7.5
3	11.5	.5	24.5	5.0	19.0	9.0	---	---	25.5	12.5	22.5	9.5
4	17.5	.5	24.5	6.0	20.5	9.0	---	---	25.5	11.0	23.0	8.5
5	16.5	.5	24.5	8.5	19.5	10.0	---	---	24.0	9.5	23.0	8.5
6	14.5	1.5	23.5	10.5	18.5	11.0	---	---	25.0	13.0	24.0	11.0
7	7.0	.5	---	---	19.5	11.0	---	---	26.0	10.5	20.0	13.5
8	11.5	.5	---	---	19.5	12.0	---	---	26.0	10.5	18.5	12.5
9	14.5	.5	---	---	20.5	13.0	---	---	24.0	14.0	17.0	11.5
10	5.0	1.0	---	---	20.5	13.5	---	---	25.0	10.5	18.0	12.5
11	7.5	.5	---	---	21.0	14.0	---	---	23.0	7.0	19.5	9.5
12	9.5	.0	---	---	20.5	13.5	---	---	18.0	6.0	18.5	11.5
13	13.0	.0	---	---	20.5	13.0	---	---	24.0	10.0	20.5	9.5
14	20.0	.5	---	---	20.5	13.0	---	---	24.5	13.0	20.0	7.0
15	21.0	.0	---	---	20.5	12.5	26.5	14.0	22.5	15.0	19.5	7.5
16	20.0	.0	---	---	21.0	13.0	28.0	14.0	22.5	12.0	20.5	10.5
17	22.0	.0	---	---	22.0	14.5	27.5	15.5	24.5	11.0	20.0	7.0
18	22.0	.5	---	---	21.5	16.0	29.0	17.0	24.0	11.5	20.5	6.5
19	22.5	.5	---	---	21.5	16.0	28.0	16.5	19.5	11.0	17.5	10.5
20	20.0	2.0	---	---	22.5	15.5	27.0	14.0	23.0	9.0	21.0	8.0
21	23.5	3.0	---	---	23.0	16.5	29.5	14.5	24.5	7.5	15.0	6.5
22	21.0	6.5	20.5	14.0	23.5	16.0	30.0	15.0	23.5	8.5	17.0	4.5
23	21.0	4.0	18.5	10.5	22.0	17.0	28.0	16.0	21.5	12.0	17.5	2.5
24	17.0	7.0	16.0	7.5	23.5	16.0	28.0	17.5	19.5	13.5	17.0	3.5
25	21.5	1.5	11.0	6.0	24.0	16.0	28.0	15.0	23.0	12.5	16.5	4.0
26	21.0	1.5	15.5	5.5	24.0	13.5	28.0	15.0	23.0	12.0	17.5	2.5
27	23.0	1.5	17.5	7.0	23.5	13.5	28.5	14.0	22.5	11.0	17.0	3.5
28	21.0	3.0	17.5	8.0	23.5	11.5	28.5	14.5	22.5	11.0	15.5	6.5
29	19.5	7.0	16.5	9.5	24.0	13.5	28.0	14.5	21.0	11.5	18.5	5.5
30	16.5	8.0	17.5	8.5	24.0	16.5	27.5	17.5	22.0	9.5	18.0	3.5
31	---	---	18.5	8.5	---	---	24.5	15.5	18.0	9.0	---	---

09250600 WILSON CREEK NEAR AXIAL, CO

LOCATION.--Lat 40°18'56", long 107°47'50", in NW¼SW¼ sec.14, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050002, on right bank about 300 ft (91 m) west of Gossard ranch house, 660 ft (200 m) downstream from mouth of Taylor Creek, and 2.4 mi (3.9 km) north of Axial.

DRAINAGE AREA.--20.1 mi² (52.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to September 1980 (discontinued).

REVISIONS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,300 ft (1,920 m), from topographic map.

REMARKS.--Records good.

AVERAGE DISCHARGE.--6 years, 2.20 ft³/s (0.062 m³/s), 1,590 acre-ft/yr (1.96 hm³/s).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 94 ft³/s (2.66 m³/s) Feb. 18, 1980, gage height, 4.20 ft (1.280 m); minimum discharge, 0.12 ft³/s (0.003 m³/s) Jan. 4-9, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 20 ft³/s (0.566 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 18	1210	*94	2.66	4.20	1.280	May 19	1400	-	-	*4.33	1.320
May 12	2200	42	1.19	4.21	1.283						

Minimum daily discharge, 0.42 ft³/s (0.012 m³/s) Dec. 20, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.51	.89	.86	.80	1.0	1.8	1.6	3.3	18	4.7	2.0	1.2
2	.51	.97	.77	.66	.90	2.0	1.6	3.1	17	5.0	2.0	1.1
3	.51	.93	.77	.69	.90	2.5	1.9	3.2	16	4.9	1.9	1.1
4	.51	1.0	.77	.66	.90	1.6	1.9	3.7	16	4.6	1.9	1.0
5	.54	.97	.81	.69	.80	.95	2.0	5.2	15	4.1	1.8	1.0
6	.57	.93	.81	.66	1.0	.85	2.0	13	14	3.9	1.7	1.1
7	.54	1.0	.65	.73	1.0	.85	1.7	16	13	3.9	1.7	1.0
8	.51	1.1	.84	.66	.90	1.0	1.2	20	13	3.6	1.7	.98
9	.48	1.1	.84	.73	.80	1.0	1.3	26	12	3.5	1.6	1.1
10	.49	.94	.96	.73	.80	1.2	1.5	30	12	3.5	1.6	1.4
11	.46	.94	.90	1.1	.80	1.3	1.2	36	12	3.7	1.5	1.2
12	.49	.86	.80	1.4	.80	1.2	.87	41	11	3.6	1.5	1.4
13	.52	.86	.83	3.8	.80	1.1	.79	39	11	3.4	1.5	1.5
14	.52	.94	.79	1.7	2.5	1.7	.95	39	11	3.3	1.4	1.5
15	.52	.94	.74	1.7	21	2.6	.79	37	10	3.1	1.6	1.5
16	.58	1.0	.74	1.2	5.2	1.9	.88	35	9.8	2.9	1.5	1.3
17	.55	1.0	.74	1.1	5.4	1.4	.90	37	9.8	3.0	1.3	1.2
18	.58	1.2	.73	1.2	17	1.4	.93	33	8.9	2.9	1.2	1.4
19	.61	1.0	.63	1.0	17	1.8	1.1	32	8.5	2.8	1.0	1.7
20	.83	1.2	.42	1.0	.75	.75	.89	32	8.1	2.7	1.1	2.1
21	.79	1.0	.42	1.0	.82	.82	1.3	32	7.6	2.6	1.2	2.1
22	.67	.90	.44	1.0	1.1	1.1	2.2	32	7.0	2.6	1.1	2.2
23	.67	.94	.48	1.0	2.1	2.3	2.0	31	6.5	2.4	1.3	2.3
24	.65	.96	.50	1.1	1.5	2.1	2.0	30	6.3	2.3	1.4	2.5
25	.62	.92	.51	1.1	1.3	2.2	2.3	26	5.9	2.3	1.3	2.6
26	.62	1.0	.53	1.0	2.1	2.1	2.2	24	5.8	2.2	1.3	2.6
27	.80	.90	.54	1.0	2.8	1.8	2.3	21	5.4	2.1	1.2	2.7
28	.84	.80	.56	1.0	3.3	2.0	2.3	21	5.3	2.0	1.2	2.7
29	1.0	.80	.64	1.0	2.3	1.8	2.8	19	5.1	2.2	1.1	2.8
30	.93	.90	.76	1.0	---	1.8	3.4	18	4.8	2.0	1.0	2.8
31	.84	---	.61	1.0	---	1.7	---	17	---	2.1	1.1	---
TOTAL	19.26	28.89	21.39	33.41	97.57	48.62	48.80	755.5	305.8	97.9	44.7	51.08
MEAN	.62	.96	.69	1.08	3.36	1.57	1.63	24.4	10.2	3.16	1.44	1.70
MAX	1.0	1.2	.96	3.8	21	2.6	3.4	41	18	5.0	2.0	2.8
MIN	.46	.80	.42	.66	.75	.75	.79	3.1	4.8	2.0	1.0	.98
AC-FT	38	57	42	66	194	96	97	1500	607	194	89	101

CAL YR 1979 TOTAL 1433.76 MEAN 3.93 MAX 43 MIN .36 AC-FT 2840
WTR YR 1980 TOTAL 1552.92 MEAN 4.24 MAX 41 MIN .42 AC-FT 3080

BEST DOCUMENT AVAILABLE

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1975 to September 1980 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1975 to current year.
WATER TEMPERATURE: October 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1975. Pumping sediment sampler since October 1975.

REMARKS.--This station moved upstream of Taylor Creek inflow as station 09250507 Wilson Creek above Taylor Creek, near Axial.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,780 micromhos Oct. 7, 1975; minimum, 192 micromhos Feb. 15, 1980.
WATER TEMPERATURES: Maximum, 27.5°C Aug. 12, 1976; minimum, 0.0°C many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 36,800 mg/L May 13, 1980; minimum daily, 5 mg/L estimated for several days in January 1977, Sept. 18, 1979.
SEDIMENT LOADS: Maximum daily, 3,870 tons (3,510 t) May 13, 14, 1980; minimum daily, 0.00 ton (0.00 t) several days in January 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,130 micromhos Sept. 19; minimum, 192 micromhos Feb. 15.
WATER TEMPERATURES: Maximum, 26.0°C July 10; minimum, 0.5°C on many days during November to February.
SEDIMENT CONCENTRATIONS: Maximum daily, 36,800 mg/L May 13; minimum daily, 14 mg/L Oct. 11.
SEDIMENT LOADS: Maximum daily, 3,870 tons (3,510 t) May 13, 14; minimum daily, 0.04 ton (0.04 t) Oct. 10, 11, Dec. 21.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV										
08...	1230	1.1	1850	8.3	6.0	11.2	650	250	100	97
DEC										
19...	1010	.57	1950	8.0	.5	12.2	730	330	110	110
JAN										
31...	1345	1.1	1590	7.8	.5	11.4	650	430	110	90
FEB										
19...	1615	48	309	7.8	.5	8.5	130	60	29	14
MAR										
19...	1125	1.2	1890	8.1	7.0	9.4	750	350	120	110
APR										
14...	1300	E.95	1720	8.1	12.0	8.9	650	280	110	90
MAY										
06...	1500	11	850	--	12.0	--	--	--	--	--
19...	1530	34	800	7.7	12.0	--	340	150	68	41
22...	1400	32	850	--	16.0	--	--	--	--	--
JUN										
05...	1015	15	1020	7.9	11.0	--	--	--	--	--
25...	1215	6.3	1340	7.8	19.0	5.2	550	210	100	73
JUL										
30...	1010	2.2	1520	8.0	16.5	7.6	570	240	89	84
AUG										
26...	1350	1.4	1530	8.0	18.0	8.8	560	230	87	83
SEP										
29...	1345	2.6	1700	8.1	15.5	11.0	610	300	88	95

E ESTIMATED.

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
NOV										
08...	160	2.7	9.9	400	440	130	.5	13	1190	1.62
DEC										
19...	160	2.6	9.1	408	440	120	.5	16	1210	1.65
JAN										
31...	130	2.2	8.3	220	440	150	.5	15	1080	1.47
FEB										
19...	14	.5	7.8	70	58	16	.2	10	197	.27
MAR										
19...	160	2.5	9.4	400	480	130	.6	15	1270	1.73
APR										
14...	140	2.4	9.2	370	410	130	.5	13	1130	1.54
MAY										
06...	--	--	--	--	--	--	--	--	--	--
19...	48	1.1	6.6	190	160	49	.5	9.5	502	.68
22...	--	--	--	--	--	--	--	--	--	--
JUN										
05...	--	--	--	--	--	--	--	--	--	--
25...	96	1.8	7.5	340	280	80	.6	11	857	1.17
JUL										
30...	120	2.2	8.0	330	370	97	.6	13	985	1.34
AUG										
26...	120	2.2	9.4	330	370	110	.5	13	995	1.35
SEP										
29...	140	2.5	9.9	310	410	130	.5	12	1080	1.47

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHOPH OSPHATE DISSOL. (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
NOV										
08...	3.53	.01	--	--	.050	200	230	< 10	120	90
DEC										
19...	1.86	.90	--	--	.000	180	500	< 10	220	150
JAN										
31...	3.21	.92	--	--	.010	170	2400	20	190	120
FEB										
19...	25.6	.88	--	--	.110	90	79000	40	3000	10
MAR										
19...	4.11	.80	--	--	.050	200	7300	50	280	80
APR										
14...	E6.41	.95	4.4	1.700	.040	170	56000	20	1400	30
MAY										
06...	--	--	25	3.700	--	--	150000	--	5500	--
19...	46.1	1.1	19	8.000	.030	90	200000	10	9100	80
22...	--	--	25	18.000	--	--	260000	--	7600	--
JUN										
05...	--	--	3.3	4.900	--	--	160000	--	4400	--
25...	14.6	.95	--	--	.030	150	16000	20	1100	40
JUL										
30...	5.85	1.1	--	--	.000	200	9000	< 10	240	20
AUG										
26...	3.76	.81	--	--	.000	190	3700	< 10	130	20
SEP										
29...	7.58	.79	--	--	.000	160	330	20	60	50

E ESTIMATED.

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	ALUMINUM, TOTAL (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	CADMIUM TOTAL (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL (UG/L AS CR)
DEC								
19...	1010	320	0	--	--	--	--	--
FEB								
19...	1615	220	1400	20	2	4	0	--
APR								
14...	1300	25000	--	8	--	1	--	8
MAY								
06...	1500	20000	--	19	--	5	--	0
19...	1530	36000	360	38	2	0	1	1
22...	1400	90000	--	67	--	11	--	0
JUN								
05...	1015	77000	--	27	--	5	--	0
AUG								
26...	1390	500	10	--	--	--	--	--
SEP								
29...	1345	110	0	2	2	0	1	--

DATE	COBALT, TOTAL (UG/L AS CO)	COPPER, TOTAL (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MERCURY TOTAL (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, TOTAL (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)
DEC									
19...	--	--	--	3	0	--	--	--	--
FEB									
19...	--	130	3	0	0	.2	.0	1	2
APR									
14...	21	74	--	40	--	.2	--	1	--
MAY									
06...	85	270	--	210	--	.7	--	0	--
19...	25	380	2	0	0	1.4	.0	0	2
22...	130	48	--	9	--	.9	--	1	--
JUN									
05...	69	320	--	240	--	1.7	--	0	--
AUG									
26...	--	--	--	7	0	--	--	--	--
SEP									
29...	--	9	3	3	4	.0	.0	1	2

DATE	NICKEL, TOTAL (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, TOTAL (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
DEC								
19...	--	--	--	--	30	9	8.0	7.3
FEB								
19...	180	2	3	1	650	10	110	12
APR								
14...	56	--	8	--	280	--	--	--
MAY								
06...	260	--	7	--	1100	--	--	--
19...	37	1	18	5	0	10	330	10
22...	370	--	14	--	1800	--	--	--
JUN								
05...	210	--	15	--	1100	--	--	--
AUG								
26...	--	--	--	--	40	13	8.8	7.3
SEP								
29...	2	0	9	9	20	4	7.7	4.4

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT DIS-CHARGE, SUS-PENDED (T/DAY)
NOV				
08...	1230	1.1	--	--
DEC				
19...	1010	.57	--	--
JAN				
31...	1345	1.1	--	--
FEB				
19...	1615	48	--	--
MAR				
19...	1125	1.2	--	--
APR				
14...	1300	E.95	--	--
14...	1306	.63	3910	6.7
MAY				
06...	1500	11	18000	535
19...	1530	34	--	--
MAY				
19...	1615	34	36100	3310
22...	1400	32	--	--
22...	1405	32	31800	2750
JUN				
05...	1010	15	16800	680
05...	1015	15	--	--
25...	1215	6.3	--	--
JUL				
30...	1010	2.2	--	--
AUG				
26...	1350	1.4	--	--
SEP				
29...	1345	2.6	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1890	1860	2000	1780	1580	---	1840	---	---		---	1490
2	1890	1870	1990	1770	1580	---	---	---	---		---	1490
3	1870	1830	2050	1780	1580	---	---	---	---		---	1450
4	1860	1800	2030	1770	1560	---	---	---	---		---	1390
5	1850	1810	2010	1770	1490	---	---	---	1030		---	1660
6	1860	1830	2010	1800	1530	---	---	---	1050		---	1640
7	1860	1830	2040	1790	1480	---	---	---	1100		---	1660
8	1860	1840	1980	1760	1540	---	---	---	1100		---	1620
9	1870	1850	1950	1660	1530	---	---	---	---		---	---
10	1880	1860	1900	1660	1560	---	---	---	---		---	---
11	1880	1850	1860	1740	1530	---	---	---	---		---	---
12	1870	1890	1930	1270	1510	---	---	---	---		---	1640
13	1890	1910	1950	1040	1430	---	---	---	---		---	1680
14	1890	1910	1940	1110	930	---	---	---	---		---	1680
15	1900	1910	1970	1460	459	---	---	---	---		---	1700
16	1900	1890	1930	1690	985	---	---	---	---		---	1880
17	1890	1880	1930	1730	602	---	---	---	---		---	2080
18	1880	1850	1940	1710	318	---	---	---	---		---	2020
19	1880	1830	1930	1680	477	---	---	---	---		---	1950
20	1740	1880	1890	1740	916	---	---	---	---		---	1800
21	1760	1930	1870	1740	1160	---	---	---	---		1650	1770
22	1860	1940	1840	1640	---	---	---	806	---		1650	1750
23	1870	2020	1820	1750	---	---	---	807	---		---	1750
24	1890	1990	1790	1750	---	---	---	816	---		---	1750
25	1900	1980	1780	1640	---	---	---	845	---		---	1760
26	1880	2010	1830	1700	---	---	---	861	---		---	1750
27	1810	1970	1830	1700	---	1870	---	877	---		1620	1740
28	1790	1960	1810	1660	---	1830	---	880	---		1630	1750
29	1730	1950	1800	1650	---	1790	---	---	---		1610	1750
30	1780	1970	1810	1600	---	1770	---	---	---		1590	1750
31	1830	---	1810	1600	---	1640	---	---	---		1510	---

E ESTIMATED.

BEST DOCUMENT AVAILABLE

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.0	6.5	6.0	1.0	2.0	.5	4.0	2.0	3.5	1.0	3.5	3.0
2	15.0	6.5	6.5	2.0	3.5	1.0	4.5	1.5	4.0	2.0	4.5	2.5
3	15.5	6.5	6.5	1.5	5.0	2.5	3.0	1.0	5.0	2.0	4.0	2.5
4	15.5	5.0	6.0	2.5	5.0	2.0	4.0	2.5	5.0	.5	5.0	3.5
5	15.5	5.5	7.0	3.0	4.5	2.0	4.5	1.5	4.5	.5	5.5	3.5
6	16.0	5.5	7.0	2.5	4.5	2.0	2.5	1.0	4.5	1.5	4.5	3.5
7	16.0	6.0	6.0	3.5	5.5	2.5	3.0	1.0	4.0	.5	4.0	3.0
8	15.5	6.0	6.5	3.0	5.0	3.5	3.5	2.0	2.5	.5	3.5	2.5
9	14.0	6.0	5.5	3.0	4.5	2.5	5.0	2.5	2.0	.5	4.5	2.5
10	14.5	5.0	5.0	2.0	4.5	3.0	3.5	1.0	2.5	.5	4.5	2.5
11	14.5	5.5	5.5	3.0	3.0	1.0	2.5	1.0	3.0	.5	4.5	2.5
12	13.0	5.5	5.5	1.5	1.5	1.0	3.5	2.0	3.5	.5	4.0	2.5
13	14.5	5.0	5.5	1.5	1.5	1.0	3.5	2.0	4.0	1.0	3.5	2.0
14	12.5	6.0	5.5	1.5	2.5	1.0	2.5	1.5	3.5	1.0	3.5	1.5
15	14.0	5.5	5.5	1.5	3.0	1.0	3.0	2.0	1.5	.5	6.0	3.0
16	13.0	7.0	5.5	1.0	4.0	1.5	3.5	2.5	1.5	1.0	4.0	3.0
17	12.0	5.0	5.5	1.0	4.0	1.5	4.0	2.5	2.5	1.0	3.0	2.0
18	13.0	8.0	5.0	2.5	3.5	1.0	4.0	2.0	2.0	1.0	4.0	1.0
19	12.0	8.0	4.5	1.5	3.5	1.0	3.0	1.5	2.0	1.0	9.0	2.0
20	7.5	3.0	4.5	1.5	4.5	2.0	3.5	1.5	2.5	1.5	10.0	2.0
21	9.0	4.5	4.5	1.0	4.5	2.5	2.5	1.5	4.5	2.0	8.0	2.0
22	9.5	2.5	4.0	.5	4.0	3.5	3.0	1.0	4.0	3.0	9.0	3.0
23	10.0	3.5	4.0	.5	4.5	1.5	2.5	1.0	3.5	2.5	7.0	3.0
24	11.0	4.0	4.0	1.5	4.0	1.0	3.5	1.0	4.0	2.0	11.0	3.0
25	11.5	4.5	4.0	2.0	4.0	1.5	3.5	1.5	6.5	1.5	6.0	2.0
26	10.5	5.5	3.5	1.5	3.5	1.5	2.0	1.0	4.0	1.5	8.0	2.0
27	9.5	5.0	3.5	1.0	3.5	2.0	2.5	1.0	4.0	2.0	9.0	1.0
28	9.5	3.5	2.5	.5	4.0	1.5	2.0	1.0	4.0	2.0	6.0	2.0
29	6.5	3.0	1.0	.5	3.0	1.0	3.0	.5	3.5	3.0	7.0	2.0
30	6.5	2.5	1.0	.5	2.5	1.0	1.5	.5	---	---	6.0	1.0
31	6.5	1.5	---	---	2.5	1.0	1.5	.5	---	---	5.0	1.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.5	2.0	10.5	5.5	13.5	8.5	---	---	25.5	14.5	18.5	6.5
2	9.5	2.0	10.0	4.5	16.5	7.5	---	---	24.5	12.0	19.5	6.5
3	8.5	1.5	12.0	5.0	17.5	8.5	---	---	23.5	10.5	19.5	8.5
4	11.5	2.5	12.0	6.0	18.5	8.5	---	---	20.0	10.0	20.5	7.0
5	11.0	3.0	14.0	6.0	19.0	8.5	---	---	---	---	21.5	7.5
6	9.5	4.0	12.5	6.5	19.0	9.0	---	---	---	---	22.0	9.5
7	5.5	1.5	---	---	20.0	8.5	---	---	---	---	18.0	11.5
8	8.0	1.0	---	---	20.5	9.0	25.0	12.0	---	---	16.5	10.5
9	10.0	1.0	---	---	21.5	9.0	18.5	9.5	---	---	15.5	10.0
10	4.5	2.0	---	---	21.5	9.5	26.0	16.0	---	---	16.5	11.0
11	7.0	1.5	---	---	21.5	10.0	21.5	11.5	---	---	16.0	8.5
12	7.5	1.0	---	---	20.5	9.5	---	---	---	---	16.0	10.5
13	9.5	1.0	---	---	20.5	8.5	---	---	---	---	18.0	8.5
14	15.0	1.0	---	---	20.0	8.5	22.0	10.0	---	---	17.5	7.0
15	15.5	2.5	---	---	20.0	8.5	23.0	10.5	---	---	17.0	7.0
16	14.5	1.0	---	---	20.5	8.5	29.5	10.5	---	---	18.5	8.0
17	15.5	1.5	---	---	---	---	25.5	13.5	---	---	18.0	6.0
18	14.5	3.5	---	---	---	---	---	---	---	---	18.5	6.0
19	15.5	3.0	---	---	---	---	---	---	---	---	15.5	9.0
20	16.0	6.0	---	---	---	---	---	---	---	---	17.5	8.0
21	17.0	5.0	---	---	---	---	---	---	---	---	13.5	6.5
22	13.5	5.5	---	---	---	---	23.5	12.5	21.5	7.5	15.0	5.5
23	12.0	4.5	15.5	9.0	---	---	23.0	14.0	18.0	10.5	15.0	4.5
24	11.0	6.5	13.5	7.5	---	---	24.0	12.0	17.5	12.0	15.0	5.0
25	14.0	3.0	10.0	5.0	---	---	23.5	12.0	20.0	11.0	15.0	4.5
26	13.0	3.0	14.0	5.0	---	---	23.5	12.5	21.0	10.0	15.5	5.0
27	15.5	3.5	15.0	6.5	---	---	24.0	12.5	20.0	9.5	16.0	5.5
28	15.5	4.5	16.0	7.0	---	---	---	---	20.0	9.5	15.0	6.0
29	11.0	4.5	15.0	8.5	---	---	---	---	18.5	10.0	15.5	6.5
30	9.0	6.5	15.5	8.5	---	---	---	---	19.5	8.5	16.0	5.5
31	---	---	16.0	8.0	---	---	---	---	16.5	7.5	---	---

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.51	---	.05	.89	142	.43	.86	133	.28
2	.51	24	.08	.97	71	.23	.77	101	.19
3	.51	21	.07	.93	56	.17	.77	88	.16
4	.51	25	.09	1.0	76	.25	.77	83	.15
5	.54	15	.05	.97	84	.27	.81	68	.13
6	.57	32	.11	.93	67	.27	.81	127	.37
7	.54	47	.14	1.0	---	.30	.65	51	.12
8	.51	27	.08	1.1	78	.26	.84	---	.20
9	.48	16	.05	1.1	67	.22	.84	109	.31
10	.49	15	.04	.94	72	.21	.96	115	.35
11	.46	14	.04	.94	81	.21	.90	104	.29
12	.49	20	.06	.86	96	.24	.80	141	.46
13	.52	22	.06	.86	65	.16	.83	160	.31
14	.52	20	.06	.94	---	.20	.79	64	.12
15	.52	79	.22	.94	73	.17	.74	84	.15
16	.58	62	.18	1.0	75	.20	.74	77	.13
17	.55	53	.15	1.0	75	.21	.74	102	.17
18	.58	42	.12	1.2	77	.25	.73	89	.15
19	.61	63	.18	1.0	75	.19	.63	102	.21
20	.83	99	.36	1.2	76	.23	.42	113	.13
21	.79	148	.50	1.0	75	.20	.42	35	.04
22	.67	127	.39	.90	104	.28	.44	235	.28
23	.67	84	.24	.94	120	.55	.48	174	.23
24	.65	148	.40	.96	142	.35	.50	73	.10
25	.62	72	.19	.92	135	.31	.51	---	.10
26	.62	115	.31	1.0	137	.34	.53	---	.10
27	.80	51	.15	.90	126	.32	.54	91	.13
28	.84	52	.18	.80	122	.39	.56	112	.17
29	1.0	99	.37	.80	128	.43	.64	100	.17
30	.93	114	.39	.90	154	.34	.76	105	.23
31	.84	101	.33	---	---	---	.61	70	.11
TOTAL	19.26	---	5.64	28.89	---	8.18	21.39	---	6.04

BEST DOCUMENT AVAILABLE

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.80	67	.12	1.0	222	.58	1.8	546	2.7
2	.66	108	.19	.90	245	.59	2.0	610	3.9
3	.69	117	.22	.90	249	.58	2.5	934	6.4
4	.66	94	.17	.90	265	.59	1.6	900	3.9
5	.69	98	.18	.80	240	.52	.95	677	1.8
6	.66	132	.24	1.0	258	.51	.85	587	1.4
7	.73	93	.18	1.0	292	.61	.85	1290	3.0
8	.66	122	.22	.90	237	.49	1.8	619	1.7
9	.73	123	.24	.80	320	.66	1.8	411	1.1
10	.73	160	.32	.80	284	.56	1.2	568	1.9
11	1.1	177	.51	.80	215	.32	1.3	600	2.2
12	1.4	---	.80	.80	274	.39	1.2	1400	4.8
13	3.8	774	9.0	.80	200	.21	1.1	641	2.1
14	1.7	2330	39	2.5	14300	188	1.7	750	4.3
15	1.7	351	1.7	21	18900	2380	2.6	1120	8.0
16	1.2	208	.70	5.2	16400	320	1.9	859	4.5
17	1.1	193	.57	5.4	12900	335	1.6	988	3.8
18	1.2	191	.59	17	21400	1910	1.6	1420	9.4
19	1.0	206	.57	17	19000	1620	1.8	1950	11
20	1.0	260	.63	.75	1240	24	.75	11400	25
21	1.0	299	.93	.82	2230	21	.82	13600	31
22	1.0	198	.54	1.1	739	9.7	1.1	4620	14
23	1.0	197	.58	2.1	395	2.2	2.3	1190	7.5
24	1.1	190	.50	1.5	295	1.2	2.1	970	9.5
25	1.1	168	.46	1.3	316	1.2	2.2	1290	7.8
26	1.0	241	.72	2.1	904	3.3	2.1	1140	6.8
27	1.0	265	.79	2.8	4990	61	1.8	3100	17
28	1.0	263	.72	3.3	4220	63	2.0	1340	7.1
29	1.0	160	.73	2.3	845	5.2	1.8	693	3.5
30	1.0	270	1.1	---	---	---	1.8	968	2.8
31	1.0	370	1.1	---	---	---	1.7	1260	9.9
TOTAL	33.41	---	64.32	97.57	---	6947.39	48.62	---	207.8

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	1.6	916	4.4	3.3	9490	85	18	21600	1030
2	1.6	888	4.0	3.1	7930	67	17	21200	997
3	1.9	973	5.3	3.2	7260	62	16	18400	806
4	1.9	1150	6.1	3.7	9710	97	16	14400	623
5	2.0	1420	7.6	5.2	13700	202	15	15000	606
6	2.0	1540	8.4	13	23300	829	14	20800	801
7	1.7	2080	9.5	16	23400	1010	13	15800	550
8	1.2	1270	4.5	20	23300	1240	13	14100	482
9	1.3	1140	4.1	26	23900	1700	12	12600	418
10	1.5	2220	8.9	30	25600	2070	12	13000	435
11	1.2	1510	5.0	36	28000	2830	12	14400	451
12	.87	1850	4.7	41	31100	3420	11	12400	369
13	.79	1850	4.1	39	36800	3870	11	12900	380
14	.95	2270	5.7	39	36600	3870	11	9340	271
15	.79	2450	5.3	37	32000	3160	10	8220	221
16	.88	3850	9.3	35	34900	3280	9.8	7320	193
17	.90	3260	8.1	37	34400	3460	9.8	7700	203
18	.93	4940	12	33	23100	2080	8.9	5720	137
19	1.1	6260	18	32	34300	2970	8.5	6140	141
20	.89	5820	15	32	35600	3090	8.1	5320	117
21	1.3	7620	28	32	34200	2960	7.6	4570	93
22	2.2	9920	59	32	29100	2510	7.0	7380	140
23	2.0	9030	49	31	28000	2340	6.5	10500	181
24	2.0	8800	48	30	26600	2160	6.3	9980	169
25	2.3	8930	56	26	21400	1500	5.9	6640	106
26	2.2	11100	65	24	27900	1810	5.8	5810	91
27	2.3	10600	65	21	20800	1180	5.4	4760	70
28	2.3	9380	58	21	13200	734	5.3	5330	76
29	2.8	9860	74	19	16900	853	5.1	4990	68
30	3.4	10200	94	18	22900	1120	4.8	4850	62
31	---	---	---	17	14000	650	---	---	---
TOTAL	48.80	---	746.0	755.5	---	57209	305.8	---	10275

BEST DOCUMENT AVAILABLE

09250600 WILSON CREEK NEAR AXIAL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	4.7	4890	62	2.0	1110	5.9	1.2	293	.92
2	5.0	4610	63	2.0	1210	6.4	1.1	305	.89
3	4.9	5510	72	1.9	1120	5.8	1.1	267	.77
4	4.6	5280	66	1.9	1120	5.7	1.0	192	.52
5	4.1	3890	43	1.8	817	4.4	1.0	195	.55
6	3.9	4020	42	1.7	1060	5.0	1.1	540	1.6
7	3.9	4300	46	1.7	860	3.9	1.0	1280	3.4
8	3.6	3520	35	1.7	798	3.6	.98	362	.96
9	3.5	3410	33	1.6	757	3.2	1.1	222	.65
10	3.5	4130	39	1.6	501	2.1	1.4	241	3.3
11	3.7	4340	43	1.5	472	1.9	1.2	230	.74
12	3.6	4080	39	1.5	395	1.6	1.4	---	.40
13	3.4	3560	33	1.5	511	2.0	1.5	---	.40
14	3.3	3360	30	1.4	467	1.8	1.5	---	.30
15	3.1	3170	26	1.6	1710	7.5	1.5	---	.30
16	2.9	4180	33	1.5	671	2.7	1.3	90	.34
17	3.0	4270	34	1.3	473	1.7	1.2	72	.27
18	2.9	4510	36	1.2	---	1.0	1.4	116	.31
19	2.8	4330	32	1.0	---	1.0	1.7	150	.40
20	2.7	2270	16	1.1	306	.92	2.1	122	.43
21	2.6	1770	12	1.2	279	.89	2.1	67	.27
22	2.6	2040	14	1.1	212	.64	2.2	77	.42
23	2.4	1780	11	1.3	379	1.3	2.3	70	.40
24	2.3	2130	13	1.4	545	2.0	2.5	60	.34
25	2.3	2040	12	1.3	539	2.0	2.6	102	.58
26	2.2	1460	8.6	1.3	431	1.6	2.6	78	.44
27	2.1	1150	6.4	1.2	372	1.2	2.7	92	.52
28	2.0	890	4.9	1.2	324	1.0	2.7	173	1.1
29	2.2	1100	6.4	1.1	369	1.1	2.8	88	.36
30	2.0	967	5.2	1.0	285	.81	2.8	54	.35
31	2.1	1480	8.4	1.1	293	.89	---	---	---
TOTAL	97.9	---	924.9	44.7	---	81.55	51.08	---	22.41
YEAR	1552.92		76098.23						

BEST DOCUMENT AVAILABLE

09250610 JUBB CREEK NEAR AXIAL, CO

LOCATION.--Lat 40°18'45", long 107°49'18", in SE¼SE¼ sec.16, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050002, on right bank about 500 ft (152 m) upstream from unnamed tributary and 2.4 mi (3.9 km) northwest of Axial.

DRAINAGE AREA.--7.53 mi² (19.50 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,400 ft (1,951 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 5.6 ft³/s (0.16 m³/s), Feb. 19, 1980, result of discharge measurement; maximum gage height, 3.62 ft (1.10 m) Feb. 18, 1980 (backwater from ice); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 5.6 ft³/s (0.16 m³/s) at 1700 Feb. 19, gage height, 3.07 ft (0.936 m), result of discharge measurement; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.02	.00	.00	.00	.01	.12	.40	2.4	1.1	.35	.21
2	.03	.02	.00	.00	.00	.00	.12	.38	2.2	1.1	.35	.18
3	.02	.02	.00	.00	.00	.00	.11	.44	1.9	.96	.31	.14
4	.03	.02	.00	.00	.00	.00	.12	.49	1.9	.95	.26	.14
5	.03	.01	.00	.00	.00	.00	.19	.55	1.9	.88	.28	.12
6	.03	.01	.00	.00	.00	.00	.28	.56	1.8	.82	.28	.13
7	.03	.01	.00	.00	.00	.00	.16	.62	1.8	.85	.29	.15
8	.04	.01	.00	.00	.00	.00	.08	.68	1.8	.84	.25	.21
9	.03	.01	.00	.00	.00	.00	.13	.90	1.7	.77	.25	.17
10	.03	.01	.00	.00	.00	.00	.19	.92	1.7	.75	.23	.20
11	.03	.01	.00	.00	.00	.00	.12	1.4	1.6	.74	.22	.20
12	.03	.01	.00	.00	.00	.00	.04	1.6	1.5	.72	.22	.20
13	.03	.01	.00	.00	.05	.00	.04	1.4	1.5	.71	.22	.18
14	.05	.00	.00	.00	.30	.01	.10	1.3	1.4	.69	.21	.16
15	.05	.00	.00	.00	1.0	.02	.19	1.4	1.4	.64	.25	.15
16	.04	.00	.00	.00	.35	.04	.19	1.6	1.4	.59	.41	.17
17	.04	.00	.00	.00	.10	.06	.19	2.9	1.3	.57	.23	.17
18	.03	.00	.00	.00	5.2	.08	.25	1.8	1.3	.56	.22	.13
19	.03	.00	.00	.00	5.5	.08	.28	1.7	1.3	.55	.20	.14
20	.03	.00	.00	.00	.20	.08	.26	1.9	1.2	.54	.17	.24
21	.03	.00	.00	.00	.10	.09	.37	2.0	1.2	.48	.20	.18
22	.03	.00	.00	.00	.05	.09	.47	2.0	1.1	.47	.30	.22
23	.03	.00	.00	.00	.05	.09	.35	2.0	1.0	.46	.20	.19
24	.03	.00	.00	.00	.05	.10	.42	2.1	1.0	.45	.40	.17
25	.03	.00	.00	.00	.04	.10	.33	2.2	1.0	.47	.30	.19
26	.03	.00	.00	.00	.04	.10	.31	2.2	1.1	.43	.28	.17
27	.02	.00	.00	.00	.03	.11	.27	2.2	1.0	.39	.24	.18
28	.02	.00	.00	.00	.03	.11	.27	2.3	1.0	.38	.22	.18
29	.02	.00	.00	.00	.02	.11	.33	2.2	.98	.40	.21	.18
30	.02	.00	.00	.00	---	.12	.46	2.3	.96	.39	.23	.16
31	.02	---	.00	.00	---	.12	---	2.3	---	.38	.23	---
TOTAL	.94	.17	.00	.00	13.31	1.52	6.74	46.74	43.34	20.03	8.01	5.21
MEAN	.030	.006	.000	.000	.46	.049	.22	1.51	1.44	.65	.26	.17
MAX	.05	.02	.00	.00	5.5	.12	.47	2.9	2.4	1.1	.41	.24
MIN	.02	.00	.00	.00	.00	.00	.04	.38	.96	.38	.17	.12
AC-FT	1.9	.3	.00	.00	26	3.0	13	93	86	40	16	10

CAL YR 1979 TOTAL 10.75 MEAN .029 MAX .19 MIN .00 AC-FT 21
WTR YR 1980 TOTAL 146.01 MEAN .40 MAX 5.5 MIN .00 AC-FT 290

NOTE.--NO GAGE-HEIGHT RECORD JAN. 1 TO FEB. 19.

09250610 JUBB CREEK NEAR AXIAL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1976 to current year.
WATER TEMPERATURES: July 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1976.

REMARKS.--Daily maximum and minimum specific-conductance data available in in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,780 micromhos Dec. 8, 1977; minimum, 819 micromhos Oct. 7, 1977.
WATER TEMPERATURES: Maximum 30.0°C July 22, 1980; minimum, 0.0°C several days during April 1980.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,710 micromhos Nov. 1; minimum not determined.
WATER TEMPERATURES: Maximum, 30.0°C July 22; minimum, 0.0°C several days during April.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV 08...	1030	.02	1480	8.3	1.0	10.6	660	400	100	100
FEB 19...	1720	5.5	550	7.9	.5	8.5	240	82	36	37
MAR 19...	1020	.09	1750	8.2	.0	11.6	810	360	110	130
APR 14...	1100	.06	1680	8.2	9.5	9.5	780	320	97	130
MAY 19...	1435	2.0	1200	8.2	17.5	--	570	250	85	86
JUN 25...	1345	1.0	1400	7.8	18.5	--	700	300	97	110
JUL 30...	0915	.42	1600	8.2	15.5	10.6	780	360	96	130
AUG 26...	1315	.27	1600	8.3	17.0	9.6	770	370	95	130
SEP 29...	1300	.17	1670	8.3	11.5	10.2	790	360	87	140

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
NOV 08...	71	1.2	9.1	260	470	33	.3	16	956	1.3
FEB 19...	31	.9	7.7	160	120	11	.2	6.0	346	.47
MAR 19...	90	1.4	5.6	450	460	31	.4	13	1110	1.5
APR 14...	96	1.5	6.1	460	500	32	.3	12	1150	1.5
MAY 19...	43	.8	6.4	320	310	23	.3	2.9	750	1.0
JUN 25...	49	.8	5.5	400	380	26	.4	15	930	1.2
JUL 30...	66	1.0	6.0	420	460	32	.5	16	1060	1.4
AUG 26...	67	1.1	9.6	400	450	37	.3	16	1050	1.4
SEP 29...	85	1.3	8.1	430	510	42	.3	14	1150	1.5

BEST DOCUMENT AVAILABLE

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
NOV										
08...	.05	.11	--	--	.040	140	40	< 10	8	2
FEB										
19...	5.1	.05	--	--	.150	190	7900	40	160	10
MAR										
19...	.27	.01	--	--	.050	110	340	20	10	2
APR										
14...	.19	.07	--	.020	.040	130	180	< 10	0	<1
MAY										
19...	4.0	.30	.58	.010	.010	130	140	< 10	10	<1
JUN										
25...	2.6	1.4	--	--	.050	160	510	< 10	20	<3
JUL										
30...	1.2	.16	--	--	.010	160	100	< 10	10	<1
AUG										
26...	.77	.00	--	--	.000	190	510	< 10	340	<1
SEP										
29...	.53	.03	--	--	.000	120	70	< 10	0	3

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
FEB								
19...	1720	5800	70	3	1	1	<1	--
APR								
14...	1100	150	--	--	--	0	--	--
MAY								
19...	1435	100	20	1	1	0	<1	4
AUG								
26...	1315	290	0	--	--	--	--	--
SEP								
29...	1300	30	0	2	2	0	<1	--

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)
FEB									
19...	--	15	3	12	0	.0	.0	1	< 10
APR									
14...	1	3	--	0	--	--	--	--	--
MAY									
19...	1	4	3	2	1	.1	.0	0	< 10
AUG									
26...	--	--	--	4	0	--	--	--	--
SEP									
29...	--	14	2	3	5	.0	.0	0	< 10

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
FEB								
19...	10	1	1	1	70	< 3	23	17
APR								
14...	5	--	--	--	30	--	--	--
MAY								
19...	4	5	5	5	20	< 3	12	7.7
AUG								
26...	--	--	--	--	30	4	7.3	7.5
SEP								
29...	2	1	1	1	20	< 3	5.9	6.0

09250610 JUBB CREEK NEAR AXIAL. CO--Continued

DATE	TIME	PHOSPHORUS. TOTAL IN BOT. MAT. (MG/KG AS P)	ALUMINUM. RECOV. FM BOTTOM MATERIAL (UG/G)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM. RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT. RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER. RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON. RECOV. FM BOTTOM MATERIAL (UG/G AS FE)
JUN									
24...	0800	680	2900	6	1	5	10	19	2600
24...	0900	730	2100	6	2	6	20	21	5100
24...	1000	590	3100	7	2	6	10	17	3000
24...	1100	840	3600	5	1	6	10	15	1700
24...	1200	680	1400	5	1	5	10	15	6300
24...	1300	570	2100	5	1	3	10	3	1700

DATE	LEAD. RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	MANGANESE. RECOV. FM BOTTOM MATERIAL (UG/G)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	SELENIUM. TOTAL IN BOTTOM MATERIAL (UG/G)	ZINC. RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)	CARBON. ORGANIC SUSPENDED TOTAL (MG/L AS C)	CARBON. ORGANIC TOT. IN BOTTOM MAT. (G/KG AS C)	CARBON. INORGANIC. TOT IN BOT MAT (G/KG AS C)	CARBON. INORG + ORGANIC TOT. IN BOT MAT (G/KG AS C)
JUN									
24...	10	340	.0	0	32	--	43	.0	43
24...	20	250	.0	3	31	--	46	5.9	52
24...	20	230	.0	1	25	--	14	6.0	20
24...	10	210	.0	0	57	.0	54	.0	54
24...	10	190	.0	1	35	--	36	4.7	41
24...	10	160	.0	0	15	--	9.7	.2	9.9

DATE	TIME	STREAMFLOW. INSTANTANEOUS (CFS)	SEDIMENT. SUSPENDED (MG/L)	SEDIMENT. DISCHARGE. SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV					
08...	1030	.02	0	.00	--
FEB					
19...	1720	5.5	314	4.7	100
MAR					
19...	1020	.09	23	.01	--
APR					
14...	1100	.06	5	.00	--
MAY					
19...	1435	2.0	10	.05	--
JUN					
25...	1345	1.0	26	.07	--
25...	1430	1.0	77	.21	--
JUL					
30...	0915	.42	44	.05	--
30...	0935	.42	43	.05	--
AUG					
26...	1325	.27	24	.02	--
SEP					
29...	1315	.17	5	.00	--

BEST DOCUMENT AVAILABLE

09250610 JUBB CREEK NEAR AXIAL, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1550	1650			---	1560	1570	1320	1150	1480	1540	1630
2	1630	1670			---	---	1630	1340	1150	1490	1550	1640
3	1660	1620			---	---	1640	1350	1220	1500	1560	1650
4	1640	1580			---	---	1600	1320	1280	1490	1570	1670
5	1630	1540			---	---	1540	1350	1290	1470	1580	1660
6	1650	1590			---	---	1460	1290	1290	1460	1560	1650
7	1650	1520			---	---	1550	1260	1290	1440	1600	1650
8	1650	1450			---	---	1650	1230	1290	1420	1610	1650
9	1630	1460			---	---	1590	1160	1300	1440	1630	1630
10	1630	1510			---	---	1520	1130	1300	1430	1620	1610
11	1630	1570			---	---	1630	1050	1310	1430	1600	1610
12	1630	1640			---	---	1670	907	1310	1430	1600	1590
13	1640	1860			---	---	1670	1060	1350	1430	1600	1600
14	1630	---			---	1470	1640	1160	1350	1420	1610	1630
15	1630	---			415	1400	1490	1190	1360	1370	1520	1630
16	1740	---			925	1560	1450	1160	1350	1370	1560	1630
17	1690	---			852	1780	1500	1060	1370	1380	1580	1650
18	1680	---			737	1650	1470	1170	1370	1390	1580	1640
19	1650	---			519	1430	1430	1170	1380	1380	1600	1620
20	1360	---			765	1480	1480	1140	1390	1400	1610	1620
21	1370	---			1030	1460	1430	1140	1410	1410	1590	1620
22	1450	---			1230	1410	1130	1140	1410	1420	1590	1620
23	1430	---			1560	1560	1210	1140	1400	1450	1550	1620
24	1410	---			1670	1560	1290	1140	1400	1460	1530	1620
25	1360	---			1730	1510	1280	1140	1390	1450	1550	1590
26	1350	---			1750	1570	1300	1120	1420	1470	1570	1620
27	1460	---			1440	1560	1340	1110	1420	1500	1620	1610
28	1520	---			938	1620	1370	1110	1420	1520	1630	1610
29	1440	---			1190	1640	1360	1130	1420	1540	1640	1620
30	1430	---			---	1640	1320	1140	1440	1540	1650	1620
31	1540	---			---	1530	---	1140	---	1540	1640	---

09250610 JUBB CREEK NEAR AXIAL, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	13.0	9.5	1.0	1.0					---	---	.5	.5
2	13.5	6.5	1.0	1.0					---	---	---	---
3	12.5	6.5	1.0	1.0					---	---	---	---
4	11.0	3.0	1.0	1.0					---	---	---	---
5	11.5	3.0	1.0	1.0					---	---	---	---
6	12.0	4.0	1.0	1.0					---	---	---	---
7	12.0	4.0	1.0	1.0					---	---	---	---
8	12.5	4.0	1.0	1.0					---	---	---	---
9	10.5	4.5	1.0	1.0					---	---	---	---
10	10.5	2.5	1.0	1.0					---	---	---	---
11	10.5	3.0	1.0	1.0					---	---	---	---
12	9.5	3.5	1.0	1.0					---	---	---	---
13	10.5	3.0	1.0	1.0					---	---	---	---
14	11.0	4.0	---	---					---	---	.5	.0
15	11.0	4.0	---	---					1.0	.5	1.5	.0
16	10.0	6.5	---	---					1.0	.5	.5	.0
17	9.0	3.0	---	---					.5	.5	1.5	.0
18	11.5	7.0	---	---					.5	.5	1.5	.0
19	12.0	8.0	---	---					.5	.5	3.5	.0
20	7.5	1.0	---	---					.5	.5	3.5	.0
21	4.5	1.5	---	---					.5	.5	5.0	.0
22	4.0	1.0	---	---					.5	.5	5.5	.5
23	4.5	1.0	---	---					.5	.5	5.0	.5
24	5.5	1.0	---	---					.5	.5	7.5	1.0
25	7.0	1.0	---	---					.5	.5	3.0	.5
26	6.5	2.0	---	---					.5	.5	4.0	.0
27	6.0	1.5	---	---					.5	.5	8.5	.5
28	6.0	1.0	---	---					.5	.5	5.0	.5
29	3.0	1.0	---	---					.5	.5	5.0	.5
30	2.0	1.0	---	---					---	---	4.5	.0
31	1.0	1.0	---	---					---	---	.5	.0

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	2.0	.0	13.5	7.5	18.5	8.5	23.0	17.0	22.0	13.5	16.5	7.0
2	3.0	.0	13.5	6.0	20.0	8.5	19.5	16.5	22.5	15.0	17.5	7.0
3	7.5	.0	16.0	6.5	21.5	9.0	22.0	13.5	22.5	12.5	18.5	9.5
4	12.5	.0	16.5	8.0	22.0	8.5	23.0	14.0	21.0	11.0	18.5	8.5
5	9.5	1.5	19.5	8.5	22.5	9.5	22.0	12.0	18.0	11.0	18.5	8.0
6	10.0	2.5	17.5	10.0	22.0	9.5	22.5	12.0	20.0	11.5	19.0	10.5
7	6.0	.0	15.0	10.5	22.0	9.0	19.5	14.5	21.0	11.5	17.5	13.0
8	7.5	.0	19.5	10.0	23.0	9.5	22.5	16.0	21.0	11.0	16.5	12.0
9	11.0	.0	15.0	9.5	24.0	10.0	23.0	14.0	21.5	14.0	15.5	11.0
10	4.0	.0	17.0	9.0	24.0	10.5	22.5	15.0	21.0	11.5	16.5	12.0
11	7.0	.0	12.5	8.0	23.5	12.0	22.5	17.0	20.0	9.0	16.5	9.5
12	10.5	.0	11.0	5.0	22.5	11.0	22.0	15.0	16.5	8.5	15.5	11.5
13	13.0	.0	14.0	4.5	22.0	10.0	20.5	17.0	19.5	12.0	18.0	9.5
14	14.5	.0	15.0	5.5	22.0	9.5	21.5	14.0	20.5	13.0	17.0	7.5
15	16.0	1.0	13.5	7.0	20.5	9.5	22.0	14.0	18.5	12.0	16.5	7.5
16	15.5	1.0	15.0	8.0	21.5	9.5	23.0	13.5	17.5	10.5	17.5	10.5
17	17.5	.5	14.0	6.0	23.0	10.5	22.5	14.0	19.5	10.0	16.0	7.5
18	18.0	2.0	20.5	5.5	22.5	12.0	24.0	15.5	19.5	11.0	16.5	7.0
19	18.0	3.0	19.5	8.0	21.0	13.0	23.0	15.5	16.5	9.5	16.0	11.0
20	18.0	5.0	23.5	8.5	22.5	11.5	22.0	13.0	18.0	8.5	16.0	9.0
21	19.5	6.0	25.0	10.0	22.5	12.0	22.5	13.0	18.5	8.0	12.0	6.5
22	17.0	8.0	23.5	11.0	22.5	11.5	22.5	13.0	19.0	8.0	13.0	5.0
23	15.5	6.0	23.0	11.0	21.0	12.0	22.0	14.5	16.5	11.5	12.5	3.5
24	14.0	8.0	19.0	9.0	22.0	11.0	22.5	16.5	17.5	12.5	13.5	5.0
25	16.5	3.5	13.5	4.5	22.5	11.0	22.0	12.5	18.0	12.0	12.5	3.5
26	16.5	4.0	19.5	4.5	22.5	12.5	21.5	12.5	19.0	11.0	13.0	3.5
27	18.0	4.5	19.5	6.0	21.5	13.0	21.5	11.5	18.0	10.0	14.0	4.5
28	18.0	6.0	21.5	7.5	21.0	10.5	21.5	11.5	19.0	10.5	13.5	3.5
29	14.0	8.5	19.5	9.5	22.0	11.5	21.5	11.5	18.0	10.5	14.0	4.0
30	12.5	9.0	21.0	8.5	22.5	16.5	22.0	14.5	18.0	9.0	14.0	3.0
31	---	---	21.0	7.5	---	---	21.0	13.0	14.5	8.5	---	---

09251000 YAMPA RIVER NEAR MAYBELL, CO

LOCATION.--Lat 40°30'10", long 108°01'45", in NW¼ sec.2, T.6 N., R.95 W., Moffat County, Hydrologic Unit 14050002, on left bank 100 ft (30 m) downstream from bridge on U.S. Highway 40, 2.0 mi (3.2 km) downstream from Lay Creek, and 3.0 mi (4.8 km) east of Maybell.

DRAINAGE AREA.--3,410 mi^2 (8,830 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1904 to October 1905, June 1910 to November 1912, April 1916 to current year. Monthly discharge only for some periods, published in WSP 1313. No winter records prior to 1917.

GAGE.--Water-stage recorder. Datum of gage is 5,900.23 ft (1,798.390 m), National Geodetic Vertical Datum of 1929. See WSP 1733 for history of changes prior to Mar. 9, 1937.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transbasin diversions, numerous storage reservoirs, and diversions above station for irrigation of about 65,000 acres (263 km^2) above and about 800 acres (3.24 km^2) below station.

AVERAGE DISCHARGE.--64 years (water years 1917-80), 1,549 ft^3/s (43.87 m^3/s), 1,122,000 acre-ft/yr (1,383 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 17,900 ft^3/s (507 m^3/s) May 19, 1917, gage height, 10.4 ft (3.17 m), from floodmarks, site and datum then in use, from rating curve extended above 12,000 ft^3/s (340 m^3/s); minimum daily, 2.0 ft^3/s (0.057 m^3/s) July 17-19, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,000 ft^3/s (198 m^3/s) and maximums (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
May 13	1300	11,400	323	8.67	2.643	May 24	1630	*11,700	331	8.77	2.673

Minimum daily discharge, 68 ft^3/s (1.93 m^3/s) Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	335	235	200	220	440	530	8030	7490	2990	338	172
2	90	287	236	200	223	380	518	7110	7290	3250	358	167
3	73	262	238	200	222	410	527	6150	7180	3940	355	154
4	79	259	235	202	221	450	511	6490	7270	3390	321	157
5	68	281	230	202	224	380	526	6710	7930	2830	318	153
6	81	318	225	202	223	600	602	6920	8470	2360	316	148
7	76	344	230	205	225	520	810	7790	8710	1960	294	133
8	73	315	225	205	227	483	828	8550	8610	1760	289	125
9	81	324	222	205	230	502	588	9400	8280	2120	280	123
10	82	343	217	208	232	471	642	9620	8250	1750	261	120
11	85	338	215	208	234	475	915	9680	8370	1500	243	115
12	94	311	216	208	240	489	883	10600	8520	1340	219	116
13	101	310	212	210	250	439	850	11100	8470	1170	221	155
14	95	293	210	211	260	480	865	8450	8010	1080	222	172
15	102	271	213	215	280	556	1020	6770	7350	1030	222	206
16	113	271	211	209	300	583	1540	6490	6700	950	223	235
17	117	286	208	205	360	510	2070	6900	5900	834	248	209
18	121	287	205	207	500	459	2440	8010	5580	748	351	165
19	143	302	202	210	1000	440	2960	6900	5440	673	328	163
20	199	316	200	211	1500	461	3660	6710	5240	608	271	159
21	251	316	200	213	1200	475	4530	7400	5010	570	237	128
22	315	293	200	215	880	542	5560	8560	4990	530	224	117
23	357	285	205	217	700	632	6450	10300	4830	490	186	138
24	330	275	207	214	540	646	7000	11400	4640	453	206	151
25	305	273	205	212	460	681	7060	11500	4390	415	220	153
26	303	265	205	215	420	685	6330	10100	4200	416	250	148
27	301	262	205	213	420	624	6220	8260	4070	395	272	131
28	308	258	208	214	470	560	6070	7980	4030	379	246	120
29	317	250	210	217	560	551	6280	8230	3510	382	265	117
30	329	245	205	215	---	531	6780	8430	3050	358	237	135
31	335	---	202	218	---	538	---	7420	---	322	190	---
TOTAL	5415	8775	6637	6486	12821	15993	85565	257960	191780	40993	8211	4485
MEAN	175	293	214	209	442	516	2852	8321	6393	1322	265	150
MAX	357	344	238	218	1500	685	7060	11500	8710	3940	358	235
MIN	68	245	200	200	220	380	511	6150	3050	322	186	115
AC-FT	10740	17410	13160	12860	25430	31720	169700	511700	380400	81310	16290	8900

CAL YR 1979 TOTAL 661863 MEAN 1813 MAX 13400 MIN 68 AC-FT 1313000
WTR YR 1980 TOTAL 645121 MEAN 1763 MAX 11500 MIN 68 AC-FT 1280000

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued
(National Stream-Quality Accounting Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1950 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1950 to August 1973, July 1975 to current year.
WATER TEMPERATURES: November 1950 to August 1973, July 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: December 1950 to May 1958, October 1975 to September 1976, October 1977 to September 1978.

INSTRUMENTATION.--Water-quality monitor since July 1975.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,060 micromhos Apr. 10, 1980; minimum daily, 94 micromhos June 14, 1959.
WATER TEMPERATURES: Maximum, 33.0°C Aug. 29, 1976; minimum, freezing point on many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 6,000 mg/L July 22, 1951; minimum daily, 1 mg/L several days during December 1975 to February 1976, Jan. 6, 1980.
SEDIMENT LOADS: Maximum daily, 47,100 tons (42,700 t) May 9, 1958; minimum daily, 0.49 ton (0.44 t) Sept. 6, 1976.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,060 micromhos Apr. 10; minimum not determined.
WATER TEMPERATURES: Maximum, 27.0°C Aug. 8; minimum 0.0°C many days during November to March.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,220 mg/L Feb. 19; minimum daily, 1 mg/L Jan. 6.
SEDIMENT LOADS: Maximum daily, 27,000 tons (24,500 t) Apr. 25;

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN, DISSOLV (MG/L AS N)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT 11...	1100	85	645	8.1	9.5	1.0	9.5	.54	--	K19	210	59
NOV 19...	1100	270	588	8.7	1.0	1.8	9.3	.37	<4	K6	200	38
DEC 17...	1000	208	643	8.1	.5	1.8	13.4	.63	<4	K16	230	55
FEB 12...	1330	242	658	7.6	.0	2.3	10.2	1.2	K56	K8	250	88
APR 10...	1125	767	978	8.3	7.0	20	11.7	1.3	<4	K60	330	160
MAY 22...	1020	8400	234	7.3	13.0	180	8.2	1.6	K120	310	93	23
JUN 26...	1430	4050	120	7.2	17.0	16	7.8	.38	62	K64	47	7
JUL 22...	1300	508	350	8.2	23.0	3.4	7.8	.89	80	92	130	26
AUG 27...	1430	271	580	8.3	23.0	18	8.9	.44	K32	140	200	58

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT 11...	44	24	54	1.6	3.4	150	150	8.5	.3	.8	--	376
NOV 19...	43	22	39	1.2	2.3	160	110	15	.2	6.3	330	334
DEC 17...	49	25	48	1.4	2.8	170	130	16	.3	7.2	414	382
FEB 12...	53	28	49	1.4	2.6	160	160	11	.2	11	403	414
APR 10...	61	42	86	2.1	3.4	170	310	23	.2	3.5	658	634
MAY 22...	23	8.6	9.8	.4	1.5	70	36	2.5	.2	11	147	135
JUN 26...	12	4.2	5.5	.3	.9	40	17	2.1	.1	6.4	80	73
JUL 22...	29	13	23	.9	2.0	100	63	10	.5	5.7	221	206
AUG 27...	43	22	41	1.3	3.0	140	120	17	.3	.8	356	331

K BASED ON NON-IDEAL COLONY COUNT.

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)
OCT												
11...	.51	86.6	.04	.08	.010	.010	.54	.45	.55	.09	.46	.59
NOV												
19...	.45	241	.02	.01	.010	.020	.38	.34	.39	.03	.36	.41
DEC												
17...	.56	233	.24	.24	.000	.000	.44	.39	.44	.05	.39	.68
FEB												
12...	.55	263	.57	.57	.230	.220	.34	.39	.57	.00	.61	1.1
APR												
10...	.89	1360	.69	.68	.060	.040	.72	.62	.78	.12	.66	1.5
MAY												
22...	.20	3330	.13	.15	.120	.040	1.1	1.4	1.20	.00	1.4	1.3
JUN												
26...	.11	875	--	.06	.000	.030	.41	.29	.41	.09	.32	--
JUL												
22...	.30	303	.00	.01	.000	.080	1.2	.88	1.20	.32	.88	1.2
AUG												
27...	.48	260	.00	.00	.030	.000	.57	.44	.60	.16	.44	.60

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	BIOMASS CHLORO-PHYLL RATIO PERI-PHYTON (UNITS)
OCT												
11...	.070	.010	0	--	5.9	.3	--	--	--	--	--	--
NOV												
19...	.030	.020	--	7.5	--	--	600	.390	.950	.180	.000	889
DEC												
17...	.010	.020	--	6.0	--	--	--	--	--	--	--	--
FEB												
12...	.090	.060	--	7.9	--	--	--	--	--	--	--	--
APR												
10...	.080	.010	0	9.5	--	--	--	--	--	--	--	--
MAY												
22...	.370	.020	0	9.7	--	--	930	--	--	--	--	--
JUN												
26...	.030	.020	0	--	8.3	.8	990	--	--	--	--	--
JUL												
22...	.020	.030	0	4.6	--	--	7900	--	--	--	--	--
AUG												
27...	.060	.090	0	--	9.1	.5	860	--	--	--	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
OCT										
11...	1100	1	1	100	70	0	< 1	10	10	0
JUN										
26...	1430	4	1	0	30	0	< 1	10	20	0
AUG										
27...	1430	2	1	200	80	0	< 1	0	10	1

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT									
11...	<3	54	58	100	90	2	3	20	9
JUN									
26...	<3	8	5	1800	70	5	0	50	5
AUG									
27...	<3	4	2	630	<10	4	0	40	4

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT									
11...	--	.0	30	35	0	1	0	150	70
JUN									
26...	.0	.0	4	0	1	0	0	20	<3
AUG									
27...	.0	.1	5	2	0	1	0	30	<3

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JAN					
19...	1000	210	4	2.3	--
FEB					
12...	1645	242	9	5.9	--
APR					
09...	1015	588	58	92	--
10...	1100	767	64	133	85
23...	1300	6500	794	13900	--
24...	1515	7700	934	19400	67
30...	1745	6800	1940	35600	17
MAY					
07...	1615	8100	504	11000	71
14...	1315	7900	608	13000	--
20...	1300	6650	562	10100	--
22...	1100	8400	2080	47200	--
22...	1740	8960	979	23700	--
23...	1145	10400	794	22300	67
JUN					
01...	1150	7520	296	6010	--
08...	1700	8620	324	7540	--
22...	1600	4720	120	1530	--
26...	1030	3760	95	964	--
JUL					
01...	1700	3170	70	599	--
08...	1100	2050	41	227	--
22...	1230	705	15	29	--
31...	1600	302	8	6.5	--
AUG					
08...	1015	268	14	10	--
08...	1025	268	7	5.1	--
21...	1925	222	7	4.2	--
27...	1310	271	44	32	--
27...	1820	271	33	24	--
SEP					
04...	1045	146	12	4.7	--
11...	1905	104	9	2.5	--
16...	1315	252	21	14	--
18...	1900	160	22	9.5	--
25...	1625	150	20	8.0	--

BEST DOCUMENT AVAILABLE

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	602	521	---	560	597	619	823			---	439	591
2	608	546	---	566	593	698	827			---	442	558
3	622	551	---	570	585	676	832			---	437	565
4	623	578	---	572	578	646	841			---	442	586
5	618	585	---	575	581	650	850			---	440	598
6	613	579	---	568	588	691	856			---	436	609
7	615	558	---	557	588	691	854			---	438	616
8	620	552	---	556	591	700	847			---	449	605
9	619	547	---	559	596	680	850			---	459	600
10	601	538	---	557	602	665	897			---	---	607
11	582	536	---	564	605	674	906			---	---	615
12	581	525	---	565	611	648	898			---	---	619
13	578	531	---	571	611	631	872			---	---	614
14	577	532	---	565	611	646	861			---	---	655
15	571	538	---	559	595	666	900			---	---	647
16	569	545	---	566	586	663	908			---	---	612
17	563	541	---	678	588	674	---			---	---	589
18	553	545	597	741	591	717	---			---	---	575
19	558	580	589	705	535	692	---			---	---	561
20	539	559	569	671	528	698	---			---	---	556
21	516	569	559	646	538	710	---			---	---	549
22	499	571	553	632	569	721	---			370	---	556
23	536	596	547	615	608	734	---			380	---	580
24	543	599	548	600	644	751	---			392	---	583
25	546	592	549	591	639	765	---			405	---	611
26	527	614	565	592	644	777	---			425	---	608
27	511	594	541	595	638	789	---			437	575	610
28	507	616	534	602	607	803	---			437	589	623
29	506	622	539	603	570	815	---			436	609	631
30	505	639	545	596	---	815	---			428	634	632
31	509	---	553	595	---	816	---			434	621	---

BEST DOCUMENT AVAILABLE

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	20.5	10.5	3.0	.5	---	---	.5	.5	.0	.0	.0	.0
2	19.0	11.0	4.5	.5	---	---	.5	.5	.0	.0	.0	.0
3	19.0	10.5	4.5	1.0	---	---	.5	.5	.0	.0	.0	.0
4	18.5	8.5	4.5	1.5	---	---	.5	.5	.0	.0	.0	.0
5	18.0	7.5	5.0	2.0	---	---	.5	.5	.0	.0	.0	.0
6	19.0	8.5	4.5	2.0	---	---	.5	.5	.0	.0	2.5	1.5
7	19.5	9.0	4.5	3.0	---	---	.5	.5	.0	.0	3.5	1.5
8	19.0	9.0	5.5	2.0	---	---	.5	.5	.0	.0	5.0	1.5
9	18.0	9.0	4.5	3.0	---	---	.5	.5	.0	.0	4.5	2.0
10	17.5	8.0	4.0	1.5	---	---	.5	.5	.0	.0	4.5	2.0
11	17.5	8.0	4.0	2.0	---	---	.5	.5	.0	.0	3.5	2.0
12	16.5	8.5	4.5	1.5	---	---	.5	.5	.0	.0	5.0	2.0
13	17.0	8.0	4.0	1.0	---	---	.5	.5	.0	.0	7.0	2.0
14	14.0	8.0	4.0	.5	---	---	.5	.5	.0	.0	5.0	2.0
15	15.5	8.0	4.0	.5	---	---	.5	.5	.0	.0	5.0	3.0
16	14.5	9.5	3.0	.5	---	---	.5	.5	.0	.0	4.5	3.0
17	14.5	8.0	2.0	.5	---	---	.5	.5	.0	.0	4.5	2.5
18	15.5	10.0	2.5	1.0	1.5	.5	.5	.5	.0	.0	5.0	2.0
19	12.5	10.0	1.0	.0	.5	.5	.5	.5	.0	.0	7.0	2.0
20	9.5	6.0	1.5	.0	.5	.5	.5	.5	.0	.0	8.0	4.5
21	7.5	4.5	.5	.0	.5	.5	.5	.5	.0	.0	8.0	6.0
22	7.5	4.5	.5	.0	.5	.5	.5	.5	.0	.0	8.0	6.0
23	8.0	4.5	.0	.0	.5	.5	.5	.5	.0	.0	8.0	6.0
24	9.0	6.0	.0	.0	.5	.5	.0	.0	.0	.0	8.0	6.5
25	10.5	6.5	.5	.0	.5	.5	.0	.0	.0	.0	7.0	6.5
26	11.5	7.0	.0	.0	.5	.5	.0	.0	.0	.0	7.5	5.0
27	11.0	7.5	.0	.0	.5	.5	.0	.0	.0	.0	7.5	5.0
28	9.5	6.5	.0	.0	.5	.5	.0	.0	.0	.0	6.5	5.5
29	7.5	4.0	.0	.0	.5	.5	.0	.0	.0	.0	7.5	5.5
30	4.5	2.5	.0	.0	.5	.5	.0	.0	---	---	7.0	4.5
31	3.0	1.0	---	---	.5	.5	.0	.0	---	---	6.0	3.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.5	3.5					---	---	26.0	21.0	20.5	15.0
2	6.5	5.0					---	---	26.5	20.5	22.0	15.0
3	7.5	4.5					---	---	25.0	20.5	22.5	16.0
4	9.0	6.0					---	---	23.0	18.0	23.5	16.5
5	10.0	7.5					---	---	23.0	18.0	24.0	17.5
6	10.0	8.0					---	---	24.5	19.5	24.5	18.5
7	8.5	6.5					---	---	25.5	19.5	23.0	19.0
8	7.0	5.5					---	---	27.0	20.0	21.0	18.5
9	8.5	6.0					---	---	---	---	20.5	17.0
10	8.0	7.0					---	---	---	---	21.0	18.0
11	8.0	6.0					---	---	---	---	20.0	16.0
12	8.0	5.0					---	---	---	---	21.0	16.5
13	9.0	5.0					---	---	---	---	21.5	16.0
14	11.5	7.0					---	---	---	---	21.0	16.0
15	12.5	9.0					---	---	---	---	21.0	15.5
16	12.0	8.5					---	---	---	---	21.5	17.0
17	---	---					---	---	---	---	21.5	14.5
18	---	---					---	---	---	---	22.0	14.0
19	---	---					---	---	---	---	18.5	16.0
20	---	---					---	---	---	---	21.5	13.5
21	---	---					---	---	---	---	21.5	13.0
22	---	---					26.0	23.0	---	---	20.5	10.5
23	---	---					25.5	21.0	---	---	20.0	10.5
24	---	---					25.5	20.5	---	---	20.5	12.0
25	---	---					24.0	19.5	---	---	20.5	12.0
26	---	---					24.5	19.5	---	---	20.5	12.0
27	---	---					25.0	19.5	23.5	20.5	21.0	12.0
28	---	---					25.5	20.0	23.5	19.0	22.0	12.0
29	---	---					24.5	20.5	22.5	19.0	22.0	13.0
30	---	---					25.5	20.0	21.0	18.0	21.5	13.0
31	---	---					26.0	20.5	20.0	17.0	---	---

BEST DOCUMENT AVAILABLE

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	91	---	2.0	335	6	5.4	235	6	3.8
2	90	8	1.9	287	6	4.6	236	6	3.8
3	73	5	.99	262	6	4.2	238	6	3.9
4	79	6	1.3	259	24	17	235	4	2.5
5	68	7	1.3	281	8	6.1	230	6	3.7
6	81	8	1.7	318	10	8.6	225	13	7.9
7	76	6	1.2	344	8	7.4	230	6	3.7
8	73	15	3.0	315	6	5.1	225	7	4.3
9	81	6	1.3	324	8	7.0	222	8	4.8
10	82	6	1.3	343	7	6.5	217	30	18
11	85	7	1.6	338	15	14	215	12	7.0
12	94	6	1.5	311	7	5.9	216	9	5.2
13	101	7	1.9	310	4	3.3	212	9	5.2
14	95	8	2.1	293	8	6.3	210	9	5.1
15	102	6	1.7	271	9	6.6	213	6	3.5
16	113	7	2.1	271	7	5.1	211	4	2.3
17	117	8	2.5	286	5	3.9	208	4	2.2
18	121	7	2.3	287	7	5.4	205	4	2.2
19	143	7	2.7	302	6	4.9	202	4	2.2
20	199	14	7.5	316	7	6.0	200	3	1.6
21	251	---	9.0	316	7	6.0	200	3	1.6
22	315	12	10	293	10	7.9	200	2	1.1
23	357	8	7.7	285	7	5.4	205	4	2.2
24	330	9	8.0	275	8	5.9	207	4	2.2
25	305	9	7.4	273	8	5.9	205	4	2.2
26	303	10	8.2	265	10	7.2	205	4	2.2
27	301	8	6.5	262	6	4.2	205	3	1.7
28	308	19	16	258	10	7.0	208	4	2.2
29	317	7	6.0	290	28	19	210	8	4.5
30	329	8	7.1	245	30	20	205	5	2.8
31	335	6	5.4	---	---	---	202	5	2.7
TOTAL	5415	---	133.19	8775	---	221.8	6637	---	118.3

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	200	2	1.1	220	9	5.3	440		90
2	200	2	1.1	223	6	3.6	380		60
3	200	2	1.1	222	12	7.2	410		75
4	202	2	1.1	221	8	4.8	450		95
5	202	4	2.2	224	8	4.8	380		620
6	202	1	.55	223	9	5.4	600		210
7	205	2	1.1	225	7	4.3	520		140
8	205	2	1.1	227	9	5.5	483		110
9	205	5	2.8	230	4	2.5	502		130
10	208	6	3.4	232	2	1.3	471		110
11	208	4	2.2	234	4	2.5	475		110
12	208	3	1.7	240	2	1.3	489		120
13	210	4	2.3	250	4	2.7	439		90
14	211	8	4.6	260	6	4.2	480		110
15	215	7	4.1	280	8	6.0	556		170
16	209	8	4.5	300	12	9.7	583		190
17	205	8	4.4	360	21	20	510		130
18	207	8	4.5	500	42	57	459		100
19	210	8	4.5	1000	1220	3290	440		90
20	211	6	3.4	1500	960	3890	461		100
21	213	3	1.7	1200	440	1430	475		105
22	215	---	2.0	880	---	1000	542		170
23	217	4	2.3	700	165	312	632		250
24	214	7	4.0	540	92	134	646		260
25	212	12	6.9	460	75	93	681		300
26	215	14	8.1	420	110	125	685		300
27	213	22	13	420	155	176	624		290
28	214	5	2.9	470	290	368	560		200
29	217	2	1.2	560	400	605	551		190
30	215	7	4.1	---	---	---	531		170
31	218	6	3.5	---	---	---	538		180
TOTAL	6486	---	101.45	12821	---	11571.1	15993		5265

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	530	---	170	8030	741	16100	7490	225	4550
2	518	---	170	7110	526	10100	7290	200	3940
3	527	---	170	6150	377	6260	7180	150	2910
4	511	---	160	6490	533	9340	7270	160	3140
5	526	---	170	6710	624	11300	7930	205	4390
6	602	---	230	6920	507	9470	8470	230	5260
7	810	---	400	7790	663	13900	8710	230	5410
8	828	---	420	8550	---	15000	8610	180	4180
9	588	---	220	9400	---	16000	8280	160	3580
10	642	---	260	9620	---	16000	8250	150	3340
11	915	---	520	9680	---	16000	8370	160	3620
12	883	---	460	10600	---	13000	8520	165	3800
13	850	---	450	11100	---	20000	8470	220	5030
14	865	---	470	8450	793	18100	8010	180	3890
15	1020	---	640	6770	600	11000	7350	145	2880
16	1540	---	1400	6490	---	9000	6700	140	2530
17	2070	---	2500	6900	---	10000	5900	150	2390
18	2440	---	3400	8010	---	14000	5580	130	1960
19	2960	---	5000	6900	---	10000	5440	---	1900
20	3660	---	7400	6710	560	10100	5240	---	1600
21	4530	---	10000	7400	---	12000	5010	---	1400
22	5560	---	16000	8560	700	16200	4990	100	1350
23	6450	920	16000	10300	760	21100	4830	---	1300
24	7000	---	26000	11400	615	18900	4640	100	1250
25	7060	---	27000	11500	510	15800	4390	72	853
26	6330	---	11000	10100	335	9140	4200	78	885
27	6220	---	10000	8260	285	6360	4070	65	714
28	6070	---	9600	7980	275	5930	4030	57	620
29	6280	---	10800	8230	280	6220	3510	47	445
30	6780	559	10200	8430	265	6030	3050	46	379
31	---	---	---	7420	220	4410	---	---	---
TOTAL	85565	---	171210	257960	---	376760	191780	---	79496

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	2990	43	347	338	---	15	172	19	8.8
2	3250	56	491	358	---	15	167	37	17
3	3940	180	1910	355	---	15	154	30	12
4	3390	85	778	321	---	10	157	32	14
5	2830	40	306	318	---	10	153	29	12
6	2360	---	300	316	---	10	148	20	8.0
7	1960	---	200	294	---	10	133	31	11
8	1760	---	150	289	12	9.4	125	23	7.8
9	2120	40	229	280	4	3.0	123	21	7.0
10	1750	31	146	261	4	2.8	120	22	7.1
11	1500	28	113	243	3	2.0	115	18	5.6
12	1340	31	112	219	4	2.4	116	---	5.0
13	1170	24	76	221	8	4.8	155	---	5.0
14	1080	16	47	222	4	2.4	172	---	10
15	1030	14	39	222	6	3.6	206	---	10
16	950	11	28	223	6	3.6	235	18	11
17	834	19	43	248	4	2.7	209	22	12
18	748	20	40	351	8	7.6	165	25	11
19	673	13	24	328	6	5.3	163	17	7.5
20	608	---	20	271	6	4.4	159	16	6.9
21	570	---	20	237	5	3.2	128	28	9.7
22	530	15	21	224	6	3.6	117	13	4.1
23	490	27	36	186	11	5.5	138	17	6.3
24	453	18	22	206	---	5.5	151	15	6.1
25	415	21	24	220	10	5.9	153	15	6.2
26	416	20	22	250	---	14	148	16	6.4
27	395	24	26	272	32	24	131	17	6.0
28	379	21	21	246	25	17	120	19	6.2
29	382	18	19	265	29	21	117	5	1.6
30	358	27	26	237	27	17	135	13	4.7
31	322	14	12	190	30	15	---	---	---
TOTAL	40993	---	5648	8211	---	270.7	4485	---	246.0
YEAR	645121		651041.54						

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO AUGUST 1980

DATE TIME	NOV 19,79 1100	MAY 22,80 1020	JUN 26,80 1430	JUL 22,80 1300	AUG 27,80 1430
TOTAL CELLS/ML	680	930	990	7900	860
DIVERSITY: DIVISION	1.0	0.6	1.3	1.4	1.8
.CLASS	1.0	0.6	1.3	1.4	1.8
..ORDER	1.4	1.5	2.0	1.5	1.8
...FAMILY	2.6	2.7	2.5	2.1	2.3
....GENUS	2.7	2.9	2.5	2.3	2.6

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHARACIACEAE										
....SCHROEDERIA	--	-	--	-	--	-	50	1	--	-
...CHLOROCOCCACEAE										
....CHLOROCOCCUM	30	4	--	-	--	-	--	-	--	-
...COELASTRACEAE										
....COELASTRUM	--	-	--	-	--	-	800	10	--	-
...HYDRODICTYACEAE										
....PEDIASTRUM	5	1	--	-	--	-	--	-	--	-
...MICRACTINIACEAE										
....GOLENKINIA	--	-	--	-	--	-	650	8	--	-
....MICRACTINIUM	--	-	--	-	26	3	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	15	2	--	-	39	4	100	1	120	13
....CHLORELLA	15	2	--	-	--	-	--	-	--	-
....CHODATELLA	5	1	--	-	--	-	--	-	13	1
....DICTYOSPHAERIUM	--	-	--	-	--	-	200	3	--	-
....OOCYSTIS	--	-	110	12	--	-	400	5	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-	51	6
....TETRAEDRON	--	-	--	-	--	-	50	1	--	-
...SCENEDESMACEAE										
....SCENEDESMUS	250^3	37	--	-	320^3	32	--	-	77	9
....TETRASTRUM	--	-	--	-	--	-	200	3	--	-
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	5	1	14	1	26	3	--	-	13	1
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	61	9	370^3	40	280^3	29	4400^3	55	77	9
....STEPHANODISCUS	--	-	14	1	--	-	--	-	--	-
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	27	3	--	-	--	-	--	-
....COCCONEIS	--	-	14	1	--	-	--	-	13	1
....RHOICOSPHENIA	--	-	14	1	--	-	--	-	--	-
...CYMBELLACEAE										
....CYMBELLA	--	-	14	1	--	-	--	-	--	-
...DIATOMACEAE										
....DIATOMA	130^3	19	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	26	3	--	-	--	-
....SYNEDRA	10	1	69	7	--	-	--	-	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	5	1	110	12	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	25	4	69	7	39	4	--	-	--	-
...NITZSCHIACEAE										
....NITZSCHIA	130^3	19	82	9	140	14	100	1	13	1
...SURIRELLACEAE										
....SURIRELLA	--	-	27	3	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)										
.CRYPTOPHYCEAE										
..CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	--	-	--	-	120	13
...CRYPTOMONADACEAE										
....CRYPTOMONAS	--	-	--	-	--	-	--	-	13	1
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	90	9	100	1	51	6
..HORMOGONALES										
...OSCILLATORIACEAE										
....OSCILLATORIA	--	-	--	-	--	-	900	11	310^3	36

NOTE: ^{3} - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09253000 LITTLE SNAKE RIVER NEAR SLATER, CO

LOCATION.--Lat 40°59'58", long 107°08'34", in SW¼NW¼ sec.15, T.12 N., R.87 W., Routt County, Hydrologic Unit 14050003, on left bank just downstream from highway bridge at Focus Ranch, 0.2 mi (0.3 km) downstream from Spring Creek, and 12 mi (19 km) east of Slater.

DRAINAGE AREA.--285 mi² (738 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1942 to September 1947, October 1950 to current year.

REVISED RECORDS.--WSP 1733: 1960.

GAGE.--Water-stage recorder. Datum of gage is 6,831.00 ft (2,082.089 m), National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,000 acres (8.09 km²) above station.

AVERAGE DISCHARGE.--35 years, 227 ft³/s (6.429 m³/s), 164,500 acre-ft/yr (203 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,180 ft³/s (118 m³/s) Apr. 25, 1974, gage height, 8.95 ft (2.728 m), from recorded range in stage; minimum daily, 8.6 ft³/s (0.24 m³/s) Sept. 10, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft³/s (45 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 24	0200	*2,610	73.9	7.56	2.304	June 12	0200	1,790	50.7	6.69	2.039
June 6	0200	1,880	53.2	6.73	2.051						

Minimum daily discharge, 9.9 ft³/s (0.28 m³/s) Sept. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	40	34	26	23	27	30	804	1320	412	43	15
2	28	37	33	29	23	28	27	838	1270	597	38	14
3	16	41	32	30	23	29	23	941	1290	440	36	12
4	16	37	31	29	23	28	23	947	1490	333	32	11
5	16	30	30	28	22	28	23	953	1660	271	28	11
6	16	33	30	26	23	29	23	1180	1700	231	26	10
7	16	33	31	27	24	30	20	1260	1640	210	25	11
8	16	32	30	27	22	29	23	1400	1590	264	24	12
9	16	28	32	28	26	28	19	1330	1580	196	24	15
10	16	30	33	25	25	27	21	1340	1560	168	26	17
11	17	30	34	23	24	28	20	1480	1560	145	21	19
12	18	32	38	25	23	30	19	1310	1590	133	20	35
13	19	30	30	29	22	28	19	854	1490	139	21	38
14	19	29	30	32	22	27	21	721	1360	127	21	17
15	18	30	29	34	24	27	28	762	1200	110	67	13
16	25	27	28	32	25	33	36	839	958	95	57	13
17	29	28	27	30	24	39	41	992	1070	86	38	11
18	31	28	27	28	24	40	54	816	1050	87	24	11
19	33	28	27	27	27	41	82	984	1000	104	18	10
20	46	29	27	25	26	40	116	1140	934	83	18	13
21	47	30	28	26	26	40	175	1390	918	78	18	15
22	37	31	28	25	26	39	245	1910	853	71	16	13
23	29	32	27	24	26	38	306	2030	788	66	14	13
24	37	33	28	24	26	35	410	2080	730	60	16	12
25	40	34	27	24	27	33	399	1730	680	60	17	11
26	49	34	26	24	27	33	433	1450	654	61	26	11
27	45	35	25	23	27	34	492	1450	587	52	21	11
28	33	35	24	23	28	32	546	1530	506	47	15	11
29	39	35	24	23	28	30	662	1550	445	40	13	10
30	25	34	25	23	---	30	819	1390	428	39	12	9.9
31	25	---	26	26	---	30	---	1380	---	52	13	---
TOTAL	844	965	901	825	716	990	5155	38781	33901	4857	788	424.9
MEAN	27.2	32.2	29.1	26.6	24.7	31.9	172	1251	1130	157	25.4	14.2
MAX	49	41	38	34	28	41	819	2080	1700	597	67	38
MIN	16	27	24	23	22	27	19	721	428	39	12	9.9
AC-FT	1670	1910	1790	1640	1420	1960	10220	76920	67240	9630	1560	843

CAL YR 1979 TOTAL 99772.0 MEAN 273 MAX 2480 MIN 16 AC-FT 197900
WTR YR 1980 TOTAL 89147.9 MEAN 244 MAX 2080 MIN 9.9 AC-FT 176800

09253000 LITTLE SNAKE RIVER NEAR SLATER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT								
25...	1515	28	--	--	7.5	--	73	0
DEC								
19...	1400	27	--	--	--	--	78	0
FEB								
05...	1200	22	--	--	.0	--	88	0
MAR								
17...	1500	39	--	--	.5	--	79	0
MAY								
06...	1100	1020	--	--	4.0	--	36	6
JUN								
16...	1135	1060	--	--	8.0	--	25	0
SEP								
08...	1030	18	205	7.2	12.0	7.0	72	0

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT									
25...	22	4.4	10	.5	1.5	92	0	75	15
DEC									
19...	24	4.4	14	.7	1.8	100	0	82	16
FEB									
05...	23	7.5	17	.8	1.8	110	0	90	22
MAR									
17...	25	4.3	11	.5	1.5	100	0	82	14
MAY									
06...	10	2.4	3.4	.3	2.0	36	0	30	8.2
JUN									
16...	8.4	1.0	1.7	.1	.6	35	0	29	.0
SEP									
08...	20	5.0	12	.6	.6	100	0	82	12

09253000 LITTLE SNAKE RIVER NEAR SLATER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
OCT 25...	3.8	.2	19	121	.16	9.15	.00	.060
DEC 19...	4.6	.2	21	135	.18	9.84	.05	.020
FEB 05...	4.5	.2	22	153	.21	9.09	.15	.030
MAR 17...	3.3	.3	20	130	.18	13.7	.07	.020
MAY 06...	.6	.2	12	57	.08	157	.21	.210
JUN 16...	.4	.2	10	39	.05	111	.02	.020
SEP 08...	4.7	.2	9.9	110	.15	5.35	.00	.030

DATE	TIME	2,4-D, TOTAL (UG/L)	2,4-D, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4,5-T TOTAL (UG/L)	2,4,5-T TOTAL IN BOTTOM MATERIAL (UG/KG)	SILVEX, TOTAL (UG/L)	SILVEX, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT 25...	1515	.00	0	.00	0	.00	.0
JUN 25...	1300	.00	0	.00	0	.00	.0
SEP 08...	1030	.00	0	.00	0	.00	.0

09255000 SLATER FORK NEAR SLATER, CO

LOCATION.--Lat 40°58'57", long 107°22'56", in SW¼NE¼ sec.21, T.12 N., R.89 W., Moffat County, Hydrologic Unit 14050003, on right bank 15 ft (5 m) downstream from highway bridge, 1.0 mi (1.6 km) upstream from mouth, and 1.5 mi (2.4 km) south of Slater.

DRAINAGE AREA.--161 mi² (417 km²).

PERIOD OF RECORD.--May to October, December 1910, March to October 1911, and April to May 1912 (published as Slater Creek), July 1931 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 618: 1910-11. WSP 764: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,600 ft (2,012 m), from river-profile map. May 28, 1910, to May 25, 1912, nonrecording gage at site 1.5 mi (2.4 km) upstream at different datum. July 9, 1931, to May 6, 1932, nonrecording gage at site 0.2 mi (0.3 km) downstream at different datum.

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are fair. Diversions for irrigation of about 500 acres (2.02 km²) above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--49 years (water years 1932-80), 74.3 ft³/s (2.104 m³/s), 53,830 acre-ft/yr (66.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,860 ft³/s (52.7 m³/s) May 8, 1974, gage height, 10.75 ft (3.277 m), from peak indicator; maximum gage height, 10.98 ft (3.347 m) May 28, 1979, from floodmark; no flow Aug. 2-10, 1934, Aug. 18, 25-27, 1936, Aug. 29 to Sept. 3, 1954, Aug. 3, 4, 15, 16, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,170 ft³/s (33.1 m³/s) at 1000 May 24, gage height, 10.23 ft (3.118 m), only peak above base of 430 ft³/s (12 m³/s); minimum daily, 3.2 ft³/s (0.091 m³/s) Aug. 4, 5, 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	20	22	19	23	22	33	500	389	75	4.3	8.4
2	11	19	21	21	23	21	25	520	380	62	4.0	7.0
3	8.2	18	21	22	22	22	24	510	359	56	3.6	5.7
4	6.1	18	20	24	22	22	24	490	330	52	3.2	6.0
5	6.5	17	20	25	20	22	29	480	280	44	3.2	7.0
6	6.4	17	20	24	22	22	37	470	256	34	3.3	9.0
7	7.0	20	20	21	22	22	45	550	240	36	3.4	12
8	7.0	20	23	21	21	21	49	580	230	36	3.2	18
9	7.0	24	22	22	23	22	61	620	234	34	3.3	21
10	7.7	25	21	25	21	21	83	650	230	29	3.4	26
11	7.8	24	20	21	20	21	107	780	224	22	3.4	35
12	8.4	23	20	21	20	20	146	646	220	19	3.6	43
13	9.0	22	19	20	20	21	227	444	220	18	3.7	41
14	8.8	21	19	19	21	20	230	360	220	17	3.6	29
15	8.9	20	18	20	21	20	253	393	220	15	6.0	14
16	12	19	18	21	21	20	223	458	220	15	14	13
17	16	19	17	20	22	20	232	538	224	13	15	11
18	20	20	17	20	23	22	245	395	236	11	8.5	10
19	20	20	17	21	23	25	271	452	237	10	5.3	13
20	20	20	18	21	22	26	279	560	222	8.8	5.5	16
21	20	21	19	21	22	33	364	662	211	8.2	6.1	15
22	19	20	20	21	22	33	355	950	193	8.5	5.6	15
23	20	17	20	21	22	24	345	1110	182	8.5	5.3	15
24	21	20	18	20	22	24	375	1020	168	8.5	6.2	15
25	20	19	19	21	23	25	406	851	149	7.9	12	15
26	19	20	19	20	23	23	392	896	140	7.0	16	14
27	20	20	19	21	23	28	460	748	132	6.7	12	14
28	21	19	19	23	23	34	440	668	95	6.7	8.2	14
29	21	17	19	26	23	28	460	570	100	6.4	5.0	14
30	22	20	19	26	---	21	480	480	94	5.8	4.0	14
31	21	---	19	24	---	27	---	402	---	5.2	3.5	---
TOTAL	432.8	599	603	672	635	732	6700	18753	6635	686.2	187.4	490.1
MEAN	14.0	20.0	19.5	21.7	21.9	23.6	223	605	221	22.1	6.05	16.3
MAX	22	25	23	26	23	34	480	1110	389	75	16	43
MIN	6.1	17	17	19	20	20	24	360	94	5.2	3.2	5.7
AC-FT	858	1190	1200	1330	1260	1450	13290	37200	13160	1360	372	972

CAL YR 1979 TOTAL 36693.7 MEAN 101 MAX 780 MIN 4.6 AC-FT 72780
WTR YR 1980 TOTAL 37125.5 MEAN 101 MAX 1110 MIN 3.2 AC-FT 73640

NOTE.--NO GAGE-HEIGHT RECORD FEB. 11 TO MAR. 17.

BEST DOCUMENT AVAILABLE

09257000 LITTLE SNAKE RIVER NEAR DIXON, WY

LOCATION.--Lat 41°01'42", long 107°32'55", in SE¼NW¼ sec.8, T.12 N., R.90 W., Carbon County, WY, Hydrologic Unit 14050003, on left bank 200 ft (61 m) upstream from highway bridge, 1,000 ft (305 m) upstream from Willow Creek, and 0.8 mi (1.3 km) west of Dixon.

DRAINAGE AREA.--988 mi^2 (2,559 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1910 to September 1923, March 1938 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1243: 1920(M).

GAGE.--Water-stage recorder. Datum of gage is 6,331.22 ft (1,929.756 m), National Geodetic Vertical Datum of 1929. May 27, 1910, to Sept. 30, 1923, nonrecording gage on highway bridge 200 ft (61 m) downstream at datum 2.98 ft (0.908 m) higher. Mar. 15, 1938, to Sept. 30, 1957, water-stage recorder at site 225 ft (69 m) downstream at datum 2.98 ft (0.908 m) higher; Oct. 1, 1957, to June 6, 1968, at site 850 ft (259 m) downstream at present datum; and June 7 to Sept. 30, 1968, at site 225 ft (69 m) downstream at present datum.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Diversions for irrigation of about 9,500 acres (38.4 km^2) above station. One diversion above station for irrigation of about 3,000 acres (12.1 km^2) below. Transbasin diversions above station.

AVERAGE DISCHARGE.--46 years (water years 1911-23, 1939-71), 514 ft^3/s (14.56 m^3/s), 372,400 acre-ft/yr (459 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 9,600 ft^3/s (272 m^3/s) May 26, 1920, gage height, 11.6 ft (3.54 m), present datum; maximum gage height, 11.74 ft (3.578 m) May 30, 1971; no flow Sept. 19, 20, 22, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,200 ft^3/s (91 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
May 11	unknown	[a]4,900	139	unknown		May 24	1000	*5,800	164	10.95	3.338

Minimum daily discharge during period of operation, 0.16 ft^3/s (0.005 m^3/s) Oct. 6.

[a] About.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1						100	1710	2740	685	3.5	.23
2	.50						115	1820	2540	890	3.5	.24
3	.32						135	1920	2500	912	3.2	.26
4	.19						155	2000	2770	695	3.2	.22
5	.19						180	2100	3070	565	3.2	.21
6	.16						205	2150	2960	442	2.4	.20
7	.23						240	2500	2930	370	1.4	.19
8	.17						270	3000	2730	392	.56	.19
9	.17						305	3550	2710	343	.42	.18
10	.20						330	4350	2710	265	.30	.18
11	.20						340	4900	2690	185	.23	.18
12	.25						330	4780	2820	118	.20	.18
13	.38						345	2930	2650	109	.20	.21
14	.38						395	2240	2420	106	.24	.29
15	.48						435	2170	2170	83	.34	.34
16	1.5						480	2280	1940	52	.47	.29
17	4.2						540	2750	1960	23	.66	.25
18	11						600	2450	1750	20	.50	.23
19	28						650	2580	1610	16	.40	.22
20	59						710	2780	1480	12	.35	.20
21	111						790	3130	1300	10	.32	.19
22	105						880	3980	1190	12	.30	.18
23	90						970	4690	1090	10	.28	.19
24	80						1080	4910	990	9.8	.27	.20
25	88						1180	4010	960	7.2	.25	.21
26	79						1280	3070	948	7.6	.26	.20
27	72						1380	2800	906	7.2	.30	.19
28	66						1450	2970	800	6.8	.35	.18
29	68						1540	3050	710	4.8	.31	.17
30	77						1620	2940	680	4.4	.28	.17
31	88						---	2940	---	3.7	.25	---
TOTAL	1032.62						19030	93450	58724	6366.5	28.44	6.37
MEAN	33.3						634	3015	1957	205	.92	.21
MAX	111						1620	4910	3070	912	3.5	.34
MIN	.16						100	1710	680	3.7	.20	.17
AC-FT	2050						37750	185400	116500	12630	56	13

NOTE.--NO GAGE-HEIGHT RECORD OCT. 25 TO MAY 12, AUG. 13 TO SEPT. 30.

09257000 LITTLE SNAKE RIVER NEAR DIXON, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
25...	1345	85	45	10
MAR				
10...	1000	93	24	6.0
JUN				
10...	1130	E1750	116	E540
AUG				
13...	1330	5.0	38	.51

E ESTIMATED.

09258000 WILLOW CREEK NEAR DIXON, WY

LOCATION.--Lat 40°56'56", long 107°31'16", on line between secs.8 and 17, T.11 N., R.90 W., Moffat County, Colo., Hydrologic Unit 14050003, on right bank 6.2 mi (10.0 km) south of Colorado-Wyoming State line, 8.0 mi (12.9 km) upstream from mouth, and 8.3 mi (13.4 km) south of Dixon.

DRAINAGE AREA.--24 mi² (62 km²), approximately.

PERIOD OF RECORD.--October 1953 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,700 ft (2,042 m), from topographic map.

REMARKS.--Records fair except those for winter period, which are poor. One small ditch diverts water above station for irrigation. Regulation by Elk Lake, capacity, 400 acre-ft (493,000 m³). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years, 9.71 ft³/s (0.275 m³/s), 7,030 acre-ft/yr (8.67 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 319 ft³/s (9.03 m³/s) Apr. 25, 1974, gage height, 5.42 ft (1.652 m), from rating curve extended above 160 ft³/s (4.5 m³/s); no flow Sept. 17-19, 1955, many days July through September 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 70 ft³/s (2.0 m³/s); and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 21	1800	*255	7.22	5.18	1.579	May 17	2200	157	4.45	4.54	1.384
May 12	0100	185	5.24	4.74	1.445						

Minimum daily discharge, 0.86 ft³/s (0.024 m³/s) Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.8	3.3	5.1	4.7	4.1	3.1	41	18	15	5.8	1.9
2	1.4	1.8	3.4	5.1	4.5	4.0	3.1	35	17	26	6.0	1.6
3	1.4	1.8	3.5	5.1	4.4	3.9	3.1	36	20	16	5.4	1.5
4	1.4	1.8	3.6	5.1	4.4	3.8	3.0	36	28	8.7	5.3	1.5
5	1.4	1.8	3.6	5.1	3.7	3.7	3.1	32	37	6.3	5.1	1.5
6	1.5	1.8	3.7	5.1	3.6	3.6	3.1	34	40	4.8	4.7	.93
7	1.6	1.9	3.7	5.1	3.5	3.5	3.2	36	41	4.3	2.4	.86
8	1.6	1.9	3.7	5.1	3.3	3.4	3.3	46	37	4.2	1.5	1.5
9	1.6	1.9	3.8	4.9	3.2	3.3	3.3	40	37	3.3	1.5	1.7
10	1.6	1.9	3.8	4.8	3.3	3.1	3.4	49	38	2.8	1.5	1.8
11	2.0	2.0	3.9	4.6	3.3	3.0	3.5	90	42	2.1	1.5	2.9
12	1.7	2.0	3.9	4.6	3.3	2.9	3.5	87	52	1.9	1.5	2.7
13	1.7	2.0	3.8	4.6	3.3	2.9	4.0	35	47	2.4	1.6	4.3
14	1.7	2.1	3.8	4.6	3.4	2.9	7.6	24	39	3.4	1.6	2.1
15	1.7	2.1	3.9	4.6	3.6	2.9	15	17	33	3.0	4.3	1.6
16	1.8	2.1	3.9	4.6	3.7	2.9	17	20	26	2.7	4.7	1.4
17	1.8	2.2	3.9	4.6	3.8	2.8	22	87	23	3.3	3.1	1.4
18	1.8	2.2	3.9	4.6	3.9	4.2	39	43	39	7.5	2.2	1.4
19	1.8	2.3	4.0	4.6	4.0	4.2	56	34	41	7.3	1.8	1.4
20	1.9	2.3	4.0	4.6	4.1	4.1	74	25	36	7.1	2.1	2.4
21	1.9	2.4	4.0	4.6	4.2	4.1	115	27	37	7.0	2.0	2.6
22	1.9	2.5	4.1	4.7	4.2	4.1	102	35	35	7.0	1.7	1.9
23	1.9	2.6	4.2	4.7	4.3	4.0	89	49	35	6.8	1.7	1.8
24	1.9	2.7	4.3	4.8	4.3	3.9	77	50	34	6.8	3.1	1.8
25	1.9	2.8	4.4	5.0	4.3	3.8	54	32	30	7.0	2.6	1.7
26	1.9	2.8	4.5	5.1	4.3	3.7	47	18	30	6.8	4.3	1.7
27	1.9	3.0	4.6	5.1	4.2	3.5	44	18	27	6.6	2.7	1.7
28	1.8	3.1	4.7	5.1	4.2	3.4	49	22	17	4.7	1.9	1.6
29	1.8	3.1	4.8	5.0	4.1	3.3	53	25	13	4.9	1.6	1.7
30	1.8	3.2	4.9	5.0	---	3.1	70	20	13	6.4	1.5	1.7
31	1.8	---	5.0	4.8	---	3.1	---	21	---	6.3	1.7	---
TOTAL	53.2	67.9	124.6	150.4	113.1	109.2	973.3	1164	962	202.4	88.4	54.59
MEAN	1.72	2.26	4.02	4.85	3.90	3.52	32.4	37.5	32.1	6.53	2.85	1.82
MAX	2.0	3.2	5.0	5.1	4.7	4.2	115	90	52	26	6.0	4.3
MIN	1.3	1.8	3.3	4.6	3.2	2.8	3.0	17	13	1.9	1.5	.86
AC-FT	106	135	247	298	224	217	1930	2310	1910	401	175	108

CAL YR 1979 TOTAL 4711.60 MEAN 12.9 MAX 106 MIN 1.2 AC-FT 9350
WTR YR 1980 TOTAL 4063.09 MEAN 11.1 MAX 115 MIN .86 AC-FT 8060

09259700 LITTLE SNAKE RIVER NEAR BAGGS, WY

WATER-QUALITY RECORDS

LOCATION.--Lat 41°00'17", long 107°54'59", in SW¼ sec.18, T.12 N., R.94 W., Carbon County, Wyo., Hydrologic Unit 14050003, at former discharge station, 600 ft (183 m) upstream from Colorado-Wyoming State line, 0.5 mi (0.8 km) upstream from Scandinavian Wash, and 15 mi (24 km) west of Baggs, Wyo.

DRAINAGE AREA.--3,020 mi² (7,820 km²), approximately.

PERIOD OF RECORD.--Water years 1965 to August 1976, October 1977 to September 1980 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT								
25...	1200	108	--	--	1.5	--	140	0
DEC								
19...	1700	90	--	--	--	--	150	2
FEB								
05...	1615	100	--	--	--	--	150	2
MAR								
17...	1830	1750	395	7.8	3.0	--	140	0
MAY								
06...	1930	4700	195	7.4	7.0	--	70	3
JUN								
17...	1545	4600	100	7.3	14.0	7.4	45	0
SEP								
08...	1200	2.0	750	7.7	19.0	5.6	290	0

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT									
25...	40	10	40	1.5	3.0	190	6	170	54
DEC									
19...	48	8.5	19	.7	2.0	180	0	150	35
FEB									
05...	41	11	17	.6	2.0	180	0	150	34
MAR									
17...	40	9.8	26	1.0	3.3	180	0	150	42
MAY									
06...	21	3.9	5.8	.3	2.7	82	0	67	21
JUN									
17...	15	1.8	3.0	.2	1.0	59	0	48	--
SEP									
08...	65	21	70	1.9	2.4	320	0	260	100

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT								
25...	8.6	.4	16	277	.38	80.8	.10	.350
DEC								
19...	4.4	.3	19	224	.30	54.4	.00	.020
FEB								
05...	4.0	.3	20	218	.30	58.9	.07	.030
MAR								
17...	6.0	.1	14	230	.31	1090	.16	.310
MAY								
06...	1.3	.3	12	110	.15	1400	.21	.550
JUN								
17...	.9	.2	11	--	.08	745	.00	.040
SEP								
08...	19	.5	10	450	.61	2.43	.03	.010

09259700 LITTLE SNAKE RIVER NEAR BAGGS, WY--Continued

WATER-QUALITY RECORDS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	2,4-D, TOTAL (UG/L)	2,4-D, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4,5-T TOTAL (UG/L)	2,4,5-T TOTAL IN BOTTOM MATERIAL (UG/KG)	SILVEX, TOTAL (UG/L)	SILVEX, TOTAL IN BOTTOM MATERIAL (UG/KG)
OCT							
25...	1200	.00	0	.00	0	.00	.0
JUN							
25...	1500	.00	0	.00	0	.00	.0
SEP							
08...	1200	.00	0	.00	0	.00	.0

09260000 LITTLE SNAKE RIVER NEAR LILY, CO

LOCATION.--Lat 40°32'50", long 108°25'25", in NW¼NE¼ sec.20, T.7 N., R.98 W., Moffat County, Hydrologic Unit 14050003, on left bank 170 ft (52 m) downstream from highway bridge, 6.0 mi (9.7 km) north of Lily, and 10 mi (16 km) upstream from mouth.

DRAINAGE AREA.--3,730 mi^2 (9,660 km^2), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June to August 1904 (published as "near Maybell"), October 1921 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1713: 1959.

GAGE.--Water-stage recorder. Altitude of gage is 5,685 ft (1,733 m), from river-profile map. June 9 to Aug. 14, 1904, nonrecording gage, and May 5, 1922, to Nov. 30, 1935, water-stage recorder, at site 300 ft (91 m) upstream at different datums.

REMARKS.--Records fair except those for winter period and those for period of no gage-height record, which are poor. Diversions for irrigation of about 21,000 acres (85.0 km^2) above station.

AVERAGE DISCHARGE.--59 years, 573 ft^3/s (16.23 m^3/s), 415,100 acre-ft/yr (512 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,200 ft^3/s (402 m^3/s) May 27, 1926, gage height, 10.5 ft (3.20 m), site and datum then in use, from rating curve extended above 3,600 ft^3/s (102 m^3/s); maximum gage height, 11.1 ft (3.38 m), Feb. 13, 1962, from floodmark (backwater from ice); no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,500 ft^3/s (99 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 25	1000	4,070	115	5.22	1.591	May 18	0900	5,650	160	6.07	1.850
May 13	0800	*6,170	175	6.32	1.926	May 25	2200	5,430	154	5.99	1.826

Minimum daily discharge, 1.6 ft^3/s (0.045 m^3/s) Aug. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	192	49	95	135	62	1300	3200	3070	715	28	7.6
2	15	179	48	97	132	65	1340	3280	2860	664	26	9.2
3	25	159	49	99	130	70	1360	3210	2640	2180	18	9.7
4	30	120	50	101	127	75	1350	3300	2520	1480	19	8.6
5	26	141	51	104	122	80	1200	3620	2680	944	18	8.0
6	26	145	52	106	118	89	1150	3340	3030	716	14	8.5
7	22	154	54	109	115	97	1020	3810	3200	587	15	7.6
8	19	167	55	111	110	105	970	4060	3250	477	13	10
9	19	144	56	113	106	115	867	5020	3080	416	13	10
10	24	137	57	115	102	125	733	4580	3010	409	14	14
11	26	151	58	118	99	137	1020	4850	2920	387	8.3	12
12	26	150	59	120	96	150	1050	5120	2980	321	1.6	11
13	26	134	61	121	92	165	867	5930	2990	280	1.6	11
14	23	88	62	122	88	182	697	4320	2900	240	4.8	10
15	21	82	63	125	85	200	702	3170	2640	218	11	12
16	27	78	65	127	82	220	1130	2080	2410	199	18	17
17	29	75	66	130	79	245	1670	3190	2150	170	15	30
18	25	72	66	131	75	270	1720	4700	1920	144	9.2	48
19	23	70	70	133	72	310	1740	3770	1800	122	3.7	45
20	77	68	72	135	69	360	2010	3800	1710	96	4.2	43
21	120	66	74	135	66	380	2210	3490	1670	85	4.7	34
22	174	62	75	135	64	430	2530	3680	1570	81	4.4	31
23	215	63	77	138	62	475	3280	4170	1500	68	7.4	28
24	276	58	80	140	60	550	3140	4030	1410	65	12	28
25	301	56	81	141	59	620	3660	5210	1280	60	15	28
26	372	56	83	142	59	700	3100	4970	1120	51	15	41
27	563	52	85	143	59	810	2970	3690	1020	43	13	42
28	477	51	87	143	60	900	2770	3310	970	32	13	39
29	317	50	89	141	60	1000	2870	3360	899	26	10	33
30	241	49	91	140	---	1100	2820	3440	832	27	8.2	29
31	203	---	93	139	---	1200	---	3220	---	26	7.6	---
TOTAL	3776	3072	2070	3869	2583	11267	53386	122520	66111	11329	365.7	665.0
MEAN	122	102	67.0	126	89.1	363	1780	3952	2204	365	11.8	22.2
MAX	563	192	93	143	135	1200	3660	5930	3250	2180	28	48
MIN	15	49	48	95	59	62	697	2080	832	26	1.6	7.6
AC-FT	7490	6090	4120	7630	5120	22350	105900	243000	131100	22470	725	1320

CAL YR 1979 TOTAL 214715.3 MEAN 588 MAX 4720 MIN 6.0 AC-FT 425900
WTR YR 1980 TOTAL 280999.7 MEAN 768 MAX 5930 MIN 1.6 AC-FT 557400

NOTE.--NO GAGE-HEIGHT RECORD MAR. 10 TO APR. 9.

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued
(National Stream-Quality Accounting Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1969 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1975 to current year.
WATER TEMPERATURES: July 1975 to current year.

INSTRUMENTATION:--water-quality monitor since July 1975.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,020 micromhos Oct. 11, 1977; minimum, 122 micromhos June 20, 1978.
WATER TEMPERATURES: Maximum, 31.0°C Aug. 8, 9, 1978; minimum, freezing point on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,200 micromhos Oct. 4; minimum not determined.
WATER TEMPERATURES: Maximum not determined; minimum, 0.0°C on many days during November to February.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)
OCT 11...	1430	30	1120	8.0	17.5	55	7.6	--	K48	280	68	75
NOV 19...	1500	120	708	8.5	1.0	160	--	K29	K98	180	1	51
DEC 17...	1500	--	610	8.1	.5	21	11.0	K12	K60	180	38	50
FEB 13...	1000	91	611	7.7	.0	34	7.9	K12	100	210	15	59
MAR 27...	1100	815	520	8.3	3.6	2900	10.2	--	K25000	91	0	25
MAY 22...	1210	4300	240	7.2	16.0	600	6.8	K130	290	79	7	22
JUN 30...	1155	819	220	7.6	19.0	72	7.0	K60	80	78	0	23
JUL 21...	1230	87	670	8.1	27.5	19	7.0	K7	K27	200	19	55
AUG 28...	1400	14	1210	8.1	18.5	1.0	6.7	K20	130	290	98	79

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)
OCT 11...	22	130	3.4	5.3	210	300	50	.4	11	738	720	1.0
NOV 19...	13	78	2.5	2.1	180	140	31	.3	15	442	439	.60
DEC 17...	13	55	1.8	2.2	140	120	19	.3	16	417	360	.57
FEB 13...	14	53	1.6	2.3	190	120	18	.3	19	374	401	.51
MAR 27...	7.0	81	3.7	2.3	120	110	18	.3	8.0	351	325	.48
MAY 22...	5.9	19	.9	.8	72	36	4.0	.2	14	155	146	.21
JUN 30...	5.1	16	.8	1.0	83	27	5.5	.1	11	138	139	.19
JUL 21...	15	76	2.3	4.2	180	140	25	.5	16	445	438	.61
AUG 28...	22	150	3.8	5.6	190	320	78	.3	13	873	782	1.1

K BASED ON NON-IDEAL COLONY COUNT.

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)
OCT 11...	59.8	.01	.01	.010	.010	.53	.74	.51	.75	.52	.76
NOV 19...	143	.08	.02	.010	.050	.30	.65	.23	.66	.28	.74
DEC 17...	--	.10	.05	.010	.010	.40	.38	.34	.39	.35	.49
FEB 13...	92.2	.23	.18	.050	.010	.64	.43	.45	.48	.46	.71
MAR 27...	772	.26	.26	.090	.030	.79	4.6	.50	4.70	.53	5.0
MAY 22...	1800	.08	.08	.040	.030	.74	1.1	.63	1.10	.66	1.2
JUN 30...	305	.12	.02	.000	.030	.60	.64	.55	.64	.58	.76
JUL 21...	105	.00	.00	.000	.020	1.1	2.9	1.1	2.90	1.1	2.9
AUG 28...	33.0	1.1	.02	.020	.030	.84	--	.79	--	.82	--

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	BIOMASS CHLORO-PHYLL RATIO PERI-PHYTON (UNITS)	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)
OCT 11...	.000	.000	--	8.4	.5	--	--	--	--	--	--
NOV 19...	.230	.010	5.0	--	--	5	--	--	--	--	--
DEC 17...	.010	.010	7.0	--	--	--	--	--	--	--	--
FEB 13...	.110	.020	12	--	--	--	--	--	--	--	--
MAR 27...	3.20	.090	--	10	--	11000	--	--	--	--	--
MAY 22...	.720	.040	15	--	--	160	--	--	--	--	--
JUN 30...	.140	.020	--	9.4	1.0	3100	--	--	--	--	--
JUL 21...	.050	.050	6.4	--	--	16000	--	--	--	--	--
AUG 28...	.020	.010	--	8.4	.2	3500	19.1	21.8	523	5.16	.000

DATE	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)
OCT 11...	2	2	0	100	0	< 1	10	0	0	< 3
MAR 27...	23	4	1200	200	2	0	90	0	38	0
MAY 22...	--	--	--	--	--	--	--	--	--	--
JUN 30...	3	2	100	30	0	< 1	0	0	1	< 3
JUL 21...	--	--	--	--	--	--	--	--	--	--
AUG 28...	3	2	100	100	0	< 1	0	10	0	< 3

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
OCT 11...	54	42	2300	50	3	1	70	6	--
MAR 27...	150	4	57000	150	55	0	2000	10	.1
MAY 22...	--	--	--	--	--	--	--	--	--
JUN 30...	11	3	3900	20	7	0	120	<1	.1
JUL 21...	--	--	--	--	--	--	--	--	--
AUG 28...	42	12	110	<10	5	0	10	3	.0

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 11...	.0	30	28	0	0	0	0	60	140
MAR 27...	.0	99	2	3	1	0	0	450	20
MAY 22...	--	--	--	--	--	0	--	--	--
JUN 30...	.0	11	1	0	0	0	0	40	< 3
JUL 21...	--	--	--	--	--	0	--	--	--
AUG 28...	.0	4	4	0	0	0	0	80	< 3

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
06...	1000	27	125	9.1	--
11...	1430	30	127	10	78
13...	1000	27	11	8.4	--
20...	1000	76	140	29	--
27...	1000	474	10700	13700	--
NOV					
03...	1000	150	697	282	--
10...	1000	148	383	153	--
17...	1000	56	92	14	--
24...	1000	80	154	33	--
DEC					
01...	1000	49	100	13	--
08...	1000	55	65	9.7	--
15...	1000	63	44	7.5	--
29...	1000	89	51	12	--
JAN					
05...	1000	104	49	14	--
19...	1000	133	40	14	--
26...	1000	142	36	14	--
FEB					
02...	1000	132	102	36	--
09...	1000	106	107	31	--
13...	1140	91	152	37	--
16...	1100	82	175	39	--
22...	1200	64	4400	760	--
29...	1500	60	4440	719	--
APR					
10...	1345	681	300	552	58
23...	1715	3100	11500	96300	12
30...	1230	3000	7570	61300	--
MAY					
07...	1400	4530	7780	95200	62
15...	1230	3500	2970	28100	--
22...	1245	4270	2410	27800	67
22...	2000	3800	6020	61800	--
JUN					
01...	1320	3190	1620	14000	--
09...	1830	3190	1550	13400	--
22...	1730	1560	3800	16000	--
30...	1155	819	16300	36000	1
JUL					
03...	1430	1550	8280	34700	75
21...	1300	86	78	18	--
AUG					
28...	1100	14	29	1.1	--
29...	1938	9.3	14	.35	--
SEP					
05...	2010	6.0	17	.28	--
13...	1730	10	35	.99	--
20...	1720	47	31	3.9	--
27...	1510	40	31	3.4	--

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	744	772					---	257				
2	700	783					---	257				
3	748	792					---	249				
4	1140	819					---	240				
5	900	868					---	234				
6	811	847					---	226				
7	767	861					---	267				
8	710	867					---	239				
9	784	876					---	334				
10	726	819					---	303				
11	828	797					---	292				
12	---	770					---	302				
13	---	768					---	319				
14	---	776					---	---				
15	---	764					---	---				
16	---	776					---	---				
17	---	780					---	---				
18	---	782					---	---				
19	---	641					---	---				
20	---	---					---	---				
21	---	---					---	---				
22	---	---					---	---				
23	---	---					395	---				
24	---	---					390	---				
25	---	---					370	---				
26	---	---					341	---				
27	---	---					339	---				
28	---	---					271	---				
29	---	---					263	---				
30	---	---					265	---				
31	---	---					---	---				

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	22.5	8.5	---	---	.5	.5	.5	.5	.5	.5		
2	19.0	8.5	---	---	.5	.5	1.0	.5	.5	.5		
3	20.0	8.5	---	---	.5	.5	.5	.5	.5	.5		
4	19.0	5.5	---	---	.5	.5	1.0	.5	.5	.5		
5	19.5	7.0	---	---	1.0	.5	1.0	.5	.5	.5		
6	20.5	8.0	---	---	1.0	.5	1.0	.5	.5	.5		
7	20.5	8.5	---	---	1.0	.5	1.0	.5	.5	.5		
8	19.5	7.5	---	---	1.0	1.0	1.0	.5	.5	.5		
9	18.5	6.5	---	---	1.0	1.0	1.0	.5	.5	.5		
10	19.0	5.0	---	---	1.0	1.0	1.0	.5	.5	.5		
11	20.0	6.0	---	---	1.0	.5	.5	.5	.5	.5		
12	18.0	6.0	---	---	1.0	.5	.5	.5	.5	.5		
13	20.5	5.5	---	---	1.0	.5	1.0	.5	.5	.5		
14	16.0	7.0	---	---	1.0	.5	1.0	1.0	---	---		
15	16.5	5.5	---	---	1.0	.5	1.0	1.0	---	---		
16	18.5	7.5	---	---	1.0	.5	1.0	1.0	---	---		
17	16.0	5.5	---	---	---	---	1.0	1.0	---	---		
18	17.5	8.0	---	---	---	---	1.0	1.0	---	---		
19	14.0	7.0	---	---	---	---	1.0	1.0	---	---		
20	6.5	3.0	---	---	---	---	1.0	.5	---	---		
21	10.0	1.5	1.0	.5	---	---	1.0	1.0	---	---		
22	8.5	1.0	.5	.5	---	---	1.0	.5	---	---		
23	9.0	1.0	.5	.5	---	---	1.0	.5	---	---		
24	9.5	2.5	.5	.5	---	---	1.0	.5	---	---		
25	10.5	3.5	.5	.5	---	---	1.0	.5	---	---		
26	10.0	4.5	.5	.5	---	---	.5	.5	---	---		
27	10.0	5.0	.5	.5	---	---	.5	.5	---	---		
28	---	---	.5	.5	---	---	.5	.5	---	---		
29	---	---	.5	.5	---	---	.5	.5	---	---		
30	---	---	.5	.5	---	---	.5	.5	---	---		
31	---	---	---	---	---	---	.5	.5	---	---		

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	12.5	10.0								
2	---	---	13.5	9.5								
3	---	---	14.5	11.0								
4	---	---	15.0	11.5								
5	---	---	15.0	11.0								
6	---	---	15.5	11.5								
7	---	---	14.0	12.0								
8	---	---	14.0	10.5								
9	---	---	12.0	10.5								
10	---	---	---	---								
11	---	---	---	---								
12	---	---	---	---								
13	---	---	---	---								
14	---	---	---	---								
15	---	---	---	---								
16	---	---	---	---								
17	---	---	---	---								
18	---	---	---	---								
19	---	---	---	---								
20	---	---	---	---								
21	---	---	---	---								
22	---	---	---	---								
23	12.5	11.0	---	---								
24	11.5	9.5	---	---								
25	12.5	8.5	---	---								
26	13.0	8.5	---	---								
27	14.0	9.0	---	---								
28	14.0	10.0	---	---								
29	14.0	11.5	---	---								
30	12.5	10.5	---	---								
31	---	---	---	---								

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO AUGUST 1980

DATE	NOV 19,79		MAR 27,80		MAY 22,80		JUN 30,80		JUL 21,80		AUG 28,80	
TIME	1500		1100		1210		1155		1230		1400	
TOTAL CELLS/ML	5		11000		160		3100		16000		3500	
DIVERSITY: DIVISION	0.0		0.4		0.7		0.7		1.1		1.7	
.CLASS	0.0		0.4		0.7		0.7		1.1		1.7	
..ORDER	0.0		0.4		0.7		1.6		1.3		2.3	
...FAMILY	0.0		0.4		2.3		1.7		1.9		2.7	
....GENUS	0.0		0.4		2.3		2.2		2.1		3.3	
ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHARACIACEAE												
....SCHROEDERIA	--	-	--	-	--	-	--	-	170	1	--	-
...MICRACTINIACEAE												
....GOLENKINIA	--	-	--	-	--	-	--	-	83	1	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	--	-	--	-	25	1	2400[3]	16	390	11
....CHODATELLA	--	-	--	-	--	-	50	2	--	-	460	13
....DICTYOSPHAERIUM	--	-	--	-	--	-	--	-	--	-	250	7
....OOCYSTIS	--	-	--	-	--	-	--	-	--	-	*	0
....SELENASTRUM	--	-	--	-	--	-	--	-	--	-	29	1
....TREUBARIA	--	-	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE												
....ACTINASTRUM	--	-	--	-	--	-	--	-	6600[3]	43	--	-
....SCENEDESMUS	--	-	--	-	--	-	300	10	660	4	58	2
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	--	-	140	1	--	-	75	2	250	2	100	3
....CHLOROGONIUM	--	-	--	-	--	-	--	-	--	-	29	1
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	--	-	--	-	--	-	980[3]	32	4500[3]	29	58	2
....MELOSIRA	--	-	--	-	--	-	50	2	--	-	--	-
..PENNALES												
...CYMBELLACEAE												
....EPITHEMIA	--	-	--	-	27[3]	17	--	-	--	-	--	-
...DIATOMACEAE												
....DIATOMA	5[3]	100	--	-	--	-	--	-	--	-	--	-
...NAVICULACEAE												
....GYROSIGMA	--	-	140	1	--	-	--	-	--	-	--	-
....NAVICULA	--	-	--	-	27[3]	17	--	-	--	-	29	1
...NITZSCHIACEAE												
....NITZSCHIA	--	-	140	1	27[3]	17	1600[3]	51	420	3	580[3]	16
...SURIRELLACEAE												
....SURIRELLA	--	-	--	-	55[3]	33	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOCHRYSIDACEAE												
....CHROOMONAS	--	-	--	-	--	-	--	-	--	-	*	0
...CRYPTOMONADACEAE												
....CRYPTOMONAS	--	-	140	1	--	-	--	-	--	-	72	2
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHAMAESIPHONALES												
...CHAMAESIPHONACEAE												
....ENTOPHYSALIS	--	-	11000[3]	95	--	-	--	-	--	-	--	-
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	--	-	--	-	25	1	420	3	580[3]	16
..HORMOGONALES												
...NOSTOCACEAE												
....ANABAENA	--	-	--	-	--	-	--	-	--	-	200	6
...OSCILLATORIACEAE												
....OSCILLATORIA	--	-	--	-	--	-	--	-	--	-	640[3]	18
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....TRACHELOMONAS	--	-	--	-	27[3]	17	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)												
.DINOPHYCEAE												
..PERIDINIALES												
...GLENODINIACEAE												
....GLENODINIUM	--	-	--	-	--	-	--	-	--	-	*	0

NOTE: [3] - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09260025 YAMPA RIVER BELOW LITTLE SNAKE RIVER, CO

LOCATION.--Lat 40°26'21", long 108°28'19", in SW¼SW¼ sec.25, T.6 N., R.99 W., Moffat County, Hydrologic Unit 14050002, 2.1 mi (3.4 km) downstream from Little Snake River and 6 mi (9.7 km) north of Elk Springs.

PERIOD OF RECORD.--November 1977 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1977 to current year.
WATER TEMPERATURES: November 1977 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1977.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,040 micromhos Oct. 4, 1979; minimum, 64 micromhos July 13, 1978.
WATER TEMPERATURES: Maximum, 29.5°C Aug. 2, 1980; minimum, 0.0°C on many days during winter period most years.

EXTREMES FOR CURRENT YEAR.--
SPEDIFIC CONDUCTANCE: Maximum, 1,040 micromhos Oct. 5; minimum, 106 micromhos July 2.
WATER TEMPERATURES: Maximum, 29.5°C Aug. 2; minimum, 0.0°C on many days during November to February.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	701	379	635	556	615	498	866	225	162	162	392	561
2	659	363	641	558	617	567	855	243	151	163	396	600
3	672	336	623	561	616	637	841	250	125	162	397	602
4	782	350	612	565	617	702	833	203	120	256	398	604
5	997	360	608	568	619	743	827	171	---	219	401	596
6	882	377	597	570	621	763	824	180	---	208	401	583
7	811	380	573	571	622	829	827	243	---	212	---	515
8	769	383	547	574	621	858	889	246	---	217	---	504
9	744	376	527	576	619	881	930	256	---	225	---	513
10	715	369	511	577	617	909	870	242	---	223	---	518
11	697	423	498	578	616	922	666	238	---	221	---	545
12	625	385	495	579	617	922	552	246	---	230	---	543
13	606	395	494	580	571	896	652	282	---	238	---	551
14	590	395	503	581	577	870	742	291	---	246	---	558
15	589	423	518	575	584	878	719	298	---	251	---	550
16	581	479	524	564	591	866	703	292	---	260	---	555
17	581	506	546	514	591	823	708	288	---	269	---	579
18	582	504	594	524	587	837	668	306	---	282	---	592
19	572	504	606	520	547	853	---	309	---	293	---	631
20	499	480	610	519	486	829	---	299	---	303	---	620
21	476	490	609	515	494	791	---	316	---	314	---	600
22	470	520	596	520	502	783	---	234	---	321	---	573
23	485	543	581	526	517	800	456	213	---	327	---	560
24	438	586	564	544	518	842	308	193	---	337	---	557
25	418	563	570	570	515	859	315	180	---	358	---	564
26	445	525	569	590	507	875	267	171	---	361	---	556
27	391	527	560	591	509	889	229	177	---	365	---	---
28	374	542	554	597	551	899	231	176	---	372	502	---
29	381	598	554	602	572	880	226	168	---	377	511	---
30	379	605	554	609	---	877	212	158	150	384	540	---
31	380	---	555	613	---	874	---	164	---	391	555	---

09260025 YAMPA RIVER BELOW LITTLE SNAKE RIVER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.5	8.5	2.5	2.0	.0	.0	.0	.0	.0	.0	1.0	1.0
2	16.0	9.0	2.5	1.0	.0	.0	.0	.0	.0	.0	2.5	1.0
3	15.5	7.5	2.5	.0	.0	.0	.0	.0	.0	.0	2.5	1.0
4	16.0	6.5	3.5	.0	.0	.0	.0	.0	.0	.0	4.0	1.0
5	16.0	6.5	3.5	1.0	.0	.0	.0	.0	.0	.0	4.0	1.0
6	16.0	7.0	3.5	2.0	.0	.0	.0	.0	.0	.0	3.0	1.0
7	17.0	7.5	4.0	3.0	.0	.0	.0	.0	.0	.0	3.0	1.0
8	16.0	7.5	4.5	2.0	.0	.0	.0	.0	.0	.0	5.0	1.0
9	14.5	6.5	4.0	2.0	.0	.0	.0	.0	.0	.0	6.0	2.0
10	14.5	6.0	4.0	1.5	.0	.0	.0	.0	.0	.0	6.5	2.0
11	14.5	6.0	3.0	1.0	.0	.0	.0	.0	.0	.0	5.0	3.0
12	13.5	7.0	2.5	.0	.0	.0	.0	.0	.0	.0	4.5	2.0
13	15.0	6.5	3.0	.0	.0	.0	.0	.0	.5	.5	5.0	1.0
14	12.5	7.5	3.0	.0	.0	.0	.0	.0	1.0	.5	7.5	2.5
15	14.5	6.5	3.0	.0	.0	.0	.0	.0	1.0	.5	8.0	5.0
16	14.5	8.0	3.0	.0	.0	.0	.0	.0	1.0	.5	5.0	2.0
17	12.0	6.5	2.0	.0	.0	.0	.0	.0	1.0	.5	3.5	2.0
18	13.5	8.0	2.5	.0	.0	.0	.0	.0	1.0	.5	4.5	2.5
19	12.5	8.5	1.5	.0	.0	.0	.0	.0	1.0	.5	6.0	4.0
20	8.0	5.5	.5	.0	.0	.0	.0	.0	.5	.5	6.5	4.5
21	6.5	4.5	.5	.0	.0	.0	.0	.0	.5	.5	6.5	5.5
22	6.5	4.0	.0	.0	.0	.0	.0	.0	.5	.5	6.0	6.0
23	7.0	4.0	.0	.0	.0	.0	.0	.0	.5	.5	6.0	6.0
24	7.0	5.0	.0	.0	.0	.0	.0	.0	1.0	1.0	6.5	6.0
25	7.0	6.0	.5	.0	.0	.0	.0	.0	1.0	1.0	6.5	6.5
26	6.5	.0	.0	.0	.0	.0	.0	.0	1.5	1.0	6.5	6.0
27	8.0	.5	.5	.0	.0	.0	.0	.0	1.5	1.5	6.5	6.0
28	7.0	.0	.5	.0	.0	.0	.0	.0	2.0	1.5	6.0	6.0
29	6.0	3.0	.0	.0	.0	.0	.0	.0	1.5	1.0	6.0	6.0
30	3.0	1.5	.0	.0	.0	.0	.0	.0	---	---	6.0	6.0
31	2.5	2.0	---	---	.0	.0	.0	.0	---	---	6.0	5.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.5	5.5	10.5	8.5	14.5	12.0	22.0	18.5	26.5	19.5	21.5	12.0
2	5.5	5.5	10.0	8.0	15.5	13.5	21.5	20.0	29.5	17.5	22.0	11.0
3	5.5	5.5	11.0	9.0	17.0	14.0	21.0	19.0	27.0	17.5	22.0	13.0
4	6.0	5.5	12.0	9.5	20.0	16.0	21.0	18.5	26.5	15.5	23.0	13.0
5	6.5	6.0	11.5	9.5	---	---	22.0	19.0	25.5	14.5	23.5	7.5
6	7.0	7.0	12.5	10.0	---	---	22.0	19.0	17.5	16.5	23.5	15.0
7	7.5	7.5	12.0	10.5	---	---	22.0	19.5	---	---	22.0	9.5
8	7.5	7.0	11.0	9.5	---	---	22.5	19.5	---	---	21.0	16.0
9	7.5	7.0	10.5	9.5	---	---	24.0	19.5	---	---	19.5	15.0
10	8.0	5.5	10.0	8.5	---	---	23.5	21.0	---	---	19.5	16.0
11	6.5	4.0	9.0	8.5	---	---	25.0	21.0	---	---	18.5	13.5
12	6.5	3.0	9.0	7.5	---	---	22.5	21.0	---	---	21.0	14.5
13	8.0	3.5	8.5	7.0	---	---	22.0	20.0	---	---	21.5	14.0
14	10.5	5.5	9.0	6.5	---	---	22.0	18.5	---	---	20.5	12.0
15	12.0	7.5	10.5	8.0	---	---	22.5	19.0	---	---	21.0	11.0
16	11.5	7.5	11.5	9.0	---	---	24.5	19.5	---	---	22.0	13.5
17	11.5	8.5	10.5	9.5	---	---	25.0	20.5	---	---	20.5	11.0
18	11.5	9.0	11.0	8.5	---	---	26.0	21.0	---	---	20.5	11.5
19	12.0	9.5	12.0	9.0	---	---	25.5	21.5	---	---	18.5	13.0
20	12.0	10.0	14.0	10.5	---	---	27.0	20.0	---	---	21.5	10.5
21	11.0	9.5	13.5	9.0	---	---	29.0	16.5	---	---	18.5	9.5
22	11.0	9.5	15.5	14.5	---	---	28.5	17.0	---	---	20.0	8.5
23	10.5	8.0	15.0	14.5	---	---	27.0	21.5	---	---	20.0	8.0
24	9.0	8.0	14.0	11.5	---	---	26.5	20.5	---	---	20.5	9.0
25	8.5	8.0	11.5	9.5	---	---	25.0	19.0	---	---	20.5	8.0
26	9.0	7.0	11.0	8.5	---	---	26.0	18.5	---	---	18.0	11.0
27	10.5	7.5	11.5	9.0	---	---	26.5	19.0	---	---	---	---
28	10.5	8.0	13.5	10.5	---	---	28.5	17.0	21.5	17.5	---	---
29	10.5	8.5	13.5	11.5	---	---	27.5	19.0	22.5	15.0	---	---
30	10.0	8.5	13.5	11.5	20.5	19.5	26.5	19.5	20.5	13.5	---	---
31	---	---	13.5	12.0	---	---	27.5	17.0	19.5	13.0	---	---

BEST DOCUMENT AVAILABLE

09302450 LOST CREEK NEAR BUFORD, CO

LOCATION.--Lat 40°03'01", long 107°28'06", in SE¼SE¼ sec.15, T.1 N., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 15 ft (5 m) downstream from highway bridge, 540 ft (165 m) upstream from mouth, 0.5 mi (0.8 km) downstream from Long Park Creek, and 9 mi (14 km) northeast of Buford.

DRAINAGE AREA.--21.5 mi² (55.7 km²).

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,560 ft (2,304 m), from topographic map. Oct. 1, 1973, to Sept. 30, 1975, at site 150 ft (46 m) upstream at same datum.

REMARKS.--Records good. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--16 years, 21.7 ft³/s (0.615 m³/s), 15,720 acre-ft/yr (19.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 944 ft³/s (26.7 m³/s) May 9, 1974, gage height, 7.53 ft (2.295 m), from rating curve extended above 260 ft³/s (7.4 m³/s); minimum daily, 0.30 ft³/s (0.008 m³/s) Jan. 9, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 654 ft3/s (18.5 m³/s) at 1730 May 22, gage height, 4.39 ft (1.338 m), only peak above base of 150 ft³/s (4.2 m³/s); minimum daily, 1.2 ft³/s (0.034 m³/s) Sept. 15-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	^JUL	AUG	SEP
1	1.6	1.7	2.1	1.9	2.0	2.0	2.6	80	131	9.9	2.0	1.5
2	1.6	1.8	2.0	1.9	2.0	2.0	2.5	80	120	20	2.2	1.4
3	1.6	1.9	2.0	1.8	1.9	2.0	2.6	97	120	13	1.9	1.4
4	1.6	1.9	1.9	1.8	1.9	2.0	2.8	110	119	9.0	1.8	1.3
5	1.7	1.9	1.8	1.7	1.9	2.0	3.0	143	114	7.0	1.7	1.3
6	1.7	1.8	1.8	1.6	1.9	2.0	3.1	182	103	6.0	1.6	1.3
7	1.7	1.9	1.8	1.8	1.9	2.0	2.9	217	92	5.7	1.6	1.4
8	1.7	2.0	1.7	1.8	2.1	2.0	[illegible]	227	83	5.8	1.5	1.5
9	1.7	1.9	1.6	1.8	2.0	2.0	3.0	222	75	5.2	1.5	1.6
10	1.8	1.8	1.8	1.7	2.0	2.0	3.2	238	65	4.7	1.5	1.6
11	1.8	1.8	1.7	1.8	2.0	2.0	3.1	275	60	4.4	1.4	1.6
12	1.8	1.7	1.7	1.9	2.0	2.0	3.0	180	55	4.3	1.4	1.4
13	1.8	1.7	1.8	1.8	2.0	2.1	3.1	127	50	4.4	1.5	1.4
14	1.8	1.7	1.8	2.0	1.9	2.1	3.5	116	40	5.1	1.5	1.3
15	1.9	1.7	1.8	1.9	1.9	2.1	4.3	129	35	4.0	2.6	1.2
16	1.9	1.6	1.7	1.9	1.9	2.0	5.0	149	34	3.5	2.4	1.2
17	1.9	1.7	1.7	1.9	2.0	2.1	5.8	160	31	3.3	1.9	1.2
18	2.0	1.7	1.7	1.9	2.0	2.2	7.2	146	29	3.0	1.6	1.2
19	2.0	1.8	1.8	1.8	2.1	2.1	9.1	210	27	2.9	1.5	1.2
20	2.2	1.8	1.8	1.8	2.0	2.1	14	279	24	2.8	1.5	1.5
21	2.4	1.8	1.7	2.0	2.0	2.2	21	360	22	2.6	1.5	1.4
22	2.0	2.0	1.8	2.0	2.0	2.3	33	403	20	2.5	1.5	1.4
23	2.2	2.1	1.8	2.0	1.9	2.2	42	394	18	2.5	1.5	1.4
24	2.2	2.1	1.7	2.0	1.8	2.3	49	272	16	2.6	1.9	1.4
25	2.2	2.0	1.7	2.0	1.9	2.4	50	199	14	2.7	1.8	1.4
26	2.2	1.9	1.7	2.0	2.1	2.4	56	177	12	2.4	1.7	1.4
27	2.1	1.8	1.7	1.9	2.1	2.4	62	196	11	2.2	1.6	1.3
28	1.9	1.9	1.7	1.8	2.1	2.4	79	199	9.8	2.1	1.5	1.3
29	2.2	2.0	1.8	1.9	2.1	2.4	90	169	8.6	2.1	1.4	1.3
30	2.0	2.1	1.9	1.9	---	2.4	88	157	8.7	2.1	1.4	1.3
31	1.6	---	2.0	1.9	---	2.5	---	148	---	2.0	1.5	---
TOTAL	58.8	55.5	55.5	57.9	57.4	66.7	656.7	6041	1547.1	149.8	51.9	41.1
MEAN	1.90	1.85	1.79	1.87	1.98	2.15	21.9	195	51.6	4.83	1.67	1.37
MAX	2.4	2.1	2.1	2.0	2.1	2.5	90	403	131	20	2.6	1.6
MIN	1.6	1.6	1.6	1.6	1.8	2.0	2.5	80	8.6	2.0	1.4	1.2
AC-FT	117	110	110	115	114	132	1300	11980	3070	297	103	82

CAL YR 1979 TOTAL 8494.3 MEAN 23.3 MAX 354 MIN 1.1 AC-FT 16850
WTR YR 1980 TOTAL 8839.4 MEAN 24.2 MAX 403 MIN 1.2 AC-FT 17530

BEST DOCUMENT AVAILABLE

09302500 MARVINE CREEK NEAR BUFORD, CO

LOCATION.--Lat 40°02'18", long 107°29'15", in NE¼SE¼ sec.21, T.1 N., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank 166 ft (50 m) upstream from county road bridge, 1,800 ft (550 m) upstream from mouth, and 8 mi (13 km) northeast of Buford.

DRAINAGE AREA.--59.7 mi² (154.6 km²).

PERIOD OF RECORD.--July 1903 to September 1906, September 1972 to current year.

REVISED RECORDS.--WSP 1313: 1905-6. WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,500 ft (2,286 m), from topographic map. July 28, 1903, to Sept. 30, 1906, nonrecording gage at approximately same site at different datum. Sept. 1, 1972, to Sept. 30, 1973, at site 40 ft (12 m) downstream at datum 1.69 ft (0.515 m) higher. Oct. 1, 1973, to Sept. 30, 1975, at site 126 ft (38 m) downstream at datum 5.0 ft (1.5 m) higher.

REMARKS.--Records good except those for winter period or periods of no gage-height record, which are fair. Diversions above station for irrigation of 310 acres (1.25 km²) of hay meadows. One small transbasin diversion above station to Ute Creek basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--11 years, 92.0 ft³/s (2.605 m³/s), 66,660 acre-ft/yr (82.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 723 ft³/s (20.5 m³/s) June 17, 1905, gage height, 3.50 ft (1.067 m), datum then in use; maximum gage height recorded, 5.39 ft (1.643 m), Dec. 17, 1972, site then in use (backwater from ice); minimum discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 235 ft³/s (6.66 m³/s) at 0300 June 13, gage height, 3.53 ft (1.076 m), no peak above base of 300 ft³/s (8.50 m³/s); minimum daily, 39 ft³/s (1.10 m³/s) Dec. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	70	63	50	53	49	50	77	154	147	95	76
2	76	69	62	48	45	52	49	76	156	163	96	77
3	75	66	59	53	44	53	48	81	164	156	95	77
4	75	67	62	47	44	51	48	84	173	142	93	76
5	75	66	60	46	48	50	48	87	179	135	91	76
6	75	65	60	47	45	51	48	95	180	129	90	75
7	75	63	60	47	45	50	48	101	178	127	89	76
8	74	62	59	47	45	49	49	101	175	124	88	77
9	75	60	58	47	45	48	48	105	169	114	86	77
10	74	61	58	46	44	47	47	110	173	112	86	76
11	74	63	59	47	43	49	46	127	181	112	85	76
12	73	62	62	49	42	51	46	120	195	110	84	74
13	73	64	60	48	45	50	46	104	212	109	84	74
14	72	66	58	49	46	49	47	99	201	109	88	72
15	72	65	55	48	44	51	49	99	199	104	98	70
16	72	64	52	46	45	53	50	99	193	103	96	70
17	72	63	48	46	46	54	52	108	201	102	92	68
18	74	62	46	46	47	52	56	100	199	97	88	68
19	72	64	42	45	45	51	58	105	202	97	86	68
20	77	65	39	47	45	51	61	118	195	100	85	69
21	79	66	46	51	45	51	67	136	192	96	83	68
22	75	65	46	48	46	52	69	154	192	92	81	68
23	74	64	45	50	47	51	70	165	190	90	82	68
24	73	63	58	47	48	51	68	158	181	92	88	66
25	73	62	45	46	49	51	69	144	174	93	85	68
26	73	61	45	45	50	51	71	139	169	88	83	69
27	71	60	45	45	50	53	73	144	165	89	80	67
28	70	58	47	48	49	50	76	152	156	89	78	64
29	73	63	48	47	48	50	77	149	147	92	77	66
30	71	62	49	55	---	50	81	149	142	95	76	65
31	68	---	49	54	---	49	---	155	---	92	77	---
TOTAL	2281	1911	1645	1485	1338	1570	1715	3641	5387	3400	2685	2141
MEAN	73.6	63.7	53.1	47.9	46.1	50.6	57.2	117	180	110	86.6	71.4
MAX	79	70	63	55	53	54	81	165	212	163	98	77
MIN	68	58	39	45	42	47	46	76	142	88	76	64
AC-FT	4520	3790	3260	2950	2650	3110	3400	7220	10690	6740	5330	4250

CAL YR 1979 TOTAL 30271 MEAN 82.9 MAX 270 MIN 39 AC-FT 60040
WTR YR 1980 TOTAL 29199 MEAN 79.8 MAX 212 MIN 39 AC-FT 57920

NOTE.--NO GAGE-HEIGHT RECORD OCT. 31 TO DEC. 4, FEB. 7 TO MAR. 20, AUG. 30 TO SEPT. 30.

BEST DOCUMENT AVAILABLE

09303000 NORTH FORK WHITE RIVER AT BUFORD, CO

LOCATION.--Lat 39°59'15", long 107°36'50", in NW¼NW¼ sec.9, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank 600 ft (180 m) east of Buford and 1.2 mi (1.9 km) upstream from South Fork White River.

DRAINAGE AREA.--260 mi² (673 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1910 to December 1915, July 1919 to December 1920, October 1951 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as North Fork White River near Buford prior to 1951 and as White River at Buford 1951-67. Records for July 1903 to December 1906 at site 6.5 mi (10.5 km) upstream not equivalent because of inflow between sites.

REVISED RECORDS.--WSP 1343: 1912. WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,010 ft (2,137 m), from topographic map. May 24, 1910, to May 27, 1914, nonrecording gage at site 1.5 mi (2.4 km) upstream at different datum. May 28, 1914, to Dec. 7, 1915, and July 1, 1919, to Oct. 9, 1920, nonrecording gage at present site at different datum.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 900 acres (3.64 km²) above and 300 acres (1.21 km²) below station.

AVERAGE DISCHARGE.--35 years (water years 1911-15, 1920, 1952-80), 308 ft³/s (8.723 m³/s), 223,100 acre-ft/yr (275 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,150 ft³/s (89.2 m³/s) May 30, 1912; maximum gage height, 7.22 ft (2.201 m) Jan. 9, 1961 (backwater from ice); minimum daily discharge, 90 ft³/s (2.55 m³/s) Feb. 21, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 23	2300	*1,440	40.8	6.04	1.841	June 13	2400	1,210	34.3	5.75	1.753

Minimum daily discharge, 141 ft³/s (3.99 m³/s) Feb. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	187	168	180	159	164	153	150	460	892	585	263	211
2	184	184	175	163	157	152	150	442	858	649	269	212
3	184	181	170	172	152	152	149	489	897	590	262	208
4	186	183	168	168	152	158	150	524	964	529	255	204
5	187	182	165	166	150	152	152	589	1010	493	247	201
6	185	175	165	165	153	156	153	679	1030	461	238	199
7	185	179	160	164	150	155	152	776	1010	445	237	202
8	184	180	154	165	145	153	149	778	993	438	233	208
9	181	184	152	169	141	152	150	802	994	413	231	209
10	181	185	150	165	148	151	155	780	1020	400	228	210
11	180	181	148	149	146	151	151	880	1050	388	223	212
12	181	180	151	174	156	155	151	769	1090	383	219	206
13	181	175	155	168	154	152	151	618	1100	385	220	203
14	182	175	161	170	152	152	157	577	1040	383	228	198
15	183	176	165	163	156	151	173	583	997	354	276	195
16	185	173	177	159	153	153	183	615	913	341	265	197
17	186	175	170	157	149	148	193	683	883	328	245	195
18	191	181	179	156	157	150	221	607	863	321	237	195
19	189	183	180	154	156	151	255	707	856	317	234	190
20	206	184	175	154	157	150	290	858	808	313	233	207
21	208	182	175	160	157	152	344	1020	778	303	227	194
22	188	175	170	148	158	154	381	1170	766	292	222	193
23	192	170	171	149	159	152	391	1220	737	281	223	193
24	197	172	162	155	153	150	390	1120	703	282	254	188
25	195	177	170	163	149	155	383	965	684	289	241	192
26	194	180	166	152	152	151	408	876	668	275	235	187
27	191	183	166	167	152	149	425	930	653	271	221	203
28	186	185	164	158	154	149	476	985	618	268	210	190
29	194	190	160	162	160	149	510	944	581	268	207	188
30	187	185	159	150	---	150	519	897	558	273	207	194
31	172	---	157	146	---	150	---	920	---	261	207	---
TOTAL	5812	5383	5120	4970	4442	4708	7662	24263	26014	11579	7297	5984
MEAN	187	179	165	160	153	152	255	783	867	374	235	199
MAX	208	190	180	174	164	158	519	1220	1100	649	276	212
MIN	172	168	148	146	141	148	149	442	558	261	207	187
AC-FT	11530	10680	10160	9860	8810	9340	15200	48130	51600	22970	14470	11870

CAL YR 1979 TOTAL 121394 MEAN 333 MAX 1460 MIN 148 AC-FT 240800
WTR YR 1980 TOTAL 113234 MEAN 309 MAX 1220 MIN 141 AC-FT 224600

BEST DOCUMENT AVAILABLE

09303300 SOUTH FORK WHITE RIVER AT BUDGE'S RESORT, CO

LOCATION.--Lat 39°50'36", long 107°20'03", in NW¼ sec.36, T.2 S., R.89 W., Garfield County, Hydrologic Unit 14050005, on right bank 20 ft (6 m) upstream from Forest Service trail bridge, 0.2 mi (0.3 km) upstream from Wagonwheel Creek, and 0.3 mi (0.5 km) northeast of Budge's Resort.

DRAINAGE AREA.--52.3 mi² (135.5 km²).

PERIOD OF RECORD.--June 1975 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 8,980 ft (2,737 m), from topographic map. June 1, 1975, to July 7, 1976, at site on left bank 50 ft (15 m) upstream at datum 1.3 ft (0.396 m) lower.

REMARKS.--Records fair except those for winter period, which are poor. No diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--5 years, 101 ft³/s (2.86 m³/s), 73,170 acre-ft/yr (90.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 1,500 ft³/s (42.5 m³/s) June 16, 1978; minimum daily, 21 ft³/s (0.59 m³/s) Sept. 29, 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 1,300 ft³/s (36.8 m³/s) June 12; minimum daily, 30 ft³/s (0.850 m³/s) Apr. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	66	55	36	36	36	37	81	296	208	69	54
2	51	58	56	36	36	36	34	81	301	207	69	54
3	51	54	63	36	36	37	34	82	324	194	69	52
4	51	51	71	36	36	37	34	84	373	165	68	52
5	50	50	57	36	36	36	34	90	445	150	65	52
6	50	52	52	36	36	37	33	99	521	138	64	53
7	50	49	48	36	36	37	30	106	526	131	63	54
8	50	49	47	36	36	35	32	108	550	131	62	55
9	50	49	46	36	36	37	34	110	666	122	62	57
10	50	50	46	36	36	39	33	106	821	117	62	56
11	50	50	45	36	36	37	32	109	930	112	60	56
12	50	52	44	36	36	37	34	107	1000	109	59	56
13	50	60	43	36	36	46	36	97	942	109	59	55
14	50	62	42	36	36	38	36	93	811	107	62	53
15	50	59	41	36	40	36	36	96	665	100	74	51
16	51	57	40	36	36	35	36	99	600	96	79	51
17	50	55	39	36	36	38	40	101	556	92	71	50
18	52	50	38	36	36	43	47	97	549	88	64	49
19	52	49	37	36	36	37	52	108	490	85	61	49
20	58	48	36	36	35	35	59	131	434	83	61	58
21	56	48	36	36	36	37	70	167	484	82	60	55
22	56	50	36	36	37	34	74	214	482	80	58	53
23	56	53	36	36	37	33	74	254	443	80	57	52
24	54	54	36	36	38	32	69	250	397	81	57	51
25	54	54	36	36	40	32	67	226	352	84	57	51
26	53	54	36	36	46	35	71	214	330	81	57	51
27	52	54	36	36	44	37	75	229	275	75	57	50
28	50	54	36	36	41	35	83	261	236	72	57	49
29	52	54	36	36	40	34	88	266	215	71	54	49
30	48	54	36	36	---	35	90	267	207	75	54	49
31	64	---	36	36	---	37	---	288	---	73	54	---
TOTAL	1612	1599	1342	1116	1082	1130	1504	4621	15221	3398	1925	1577
MEAN	52.0	53.3	43.3	36.0	37.3	36.5	50.1	149	507	110	62.1	52.6
MAX	64	66	71	36	46	46	90	288	1000	208	79	58
MIN	48	48	36	36	35	32	30	81	207	71	54	49
AC-FT	3200	3170	2660	2210	2150	2240	2980	9170	30190	6740	3820	3130

CAL YR 1979 TOTAL 34910 MEAN 95.6 MAX 760 MIN 29 AC-FT 69240
WTR YR 1980 TOTAL 36127 MEAN 98.7 MAX 1000 MIN 30 AC-FT 71660

09303320 WAGONWHEEL CREEK AT BUDGE'S RESORT, CO

LOCATION.--Lat 39°50'40", long 107°20'10", in SW¼SW¼ sec.25, T.2 S., R.89 W., Garfield County, Hydrologic Unit 14050005, on right bank 60 ft (18 m) upstream from mouth and confluence of South Fork White River, about 800 ft (240 m) downstream from private road bridge, and 0.2 mi (0.3 km) north-northeast of Budge's Resort.

DRAINAGE AREA.--7.36 mi² (19.06 km²).

PERIOD OF RECORD.--June 1975 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 8,980 ft (2,737 m), from topographic map.

REMARKS.--Records excellent except those for periods of flow, which are poor.

AVERAGE DISCHARGE.--5 years, 6.96 ft³/s (0.197 m³/s), 5,040 acre-ft/yr (6.21 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 223 ft³/s (6.32 m³/s) June 12, 1980, gage height, 4.27 ft (1.301 m); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 223 ft³/s (6.32 m³/s) at 1800 June 12, gage height, 4.27 ft (1.301 m), only peak above base of 55 ft³/s (1.56 m³/s); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	.10	.05	.00	.00	.00	.09	.36	94	19	1.4	.35
2	.15	.10	.05	.00	.00	.00	.10	.36	59	17	1.3	.34
3	.15	.10	.05	.00	.00	.00	.12	.35	69	15	1.2	.33
4	.15	.10	.05	.00	.00	.00	.14	.34	98	13	1.2	.32
5	.15	.10	.05	.00	.00	.00	.16	.35	113	10	1.1	.31
6	.15	.10	.05	.00	.00	.00	.18	.41	129	8.5	.92	.30
7	.14	.10	.04	.00	.00	.00	.20	.48	135	8.0	.81	.29
8	.13	.10	.03	.00	.00	.00	.17	.51	115	7.6	.68	.28
9	.12	.10	.02	.00	.00	.00	.17	.56	136	7.1	.67	.27
10	.11	.10	.01	.00	.00	.00	.17	.56	154	6.1	.64	.26
11	.10	.10	.01	.00	.00	.00	.17	.58	157	5.5	.57	.25
12	.10	.10	.00	.00	.00	.00	.17	.61	166	5.5	.53	.25
13	.10	.10	.00	.00	.00	.00	.17	.58	153	5.4	.47	.25
14	.10	.10	.00	.00	.00	.00	.17	.56	131	5.3	.47	.25
15	.10	.10	.00	.00	.00	.00	.17	.56	110	4.0	.72	.25
16	.10	.10	.00	.00	.00	.00	.17	.56	92	3.0	1.2	.25
17	.10	.09	.00	.00	.00	.00	.17	.56	90	2.9	.77	.25
18	.10	.08	.00	.00	.00	.00	.17	.56	88	2.8	.58	.25
19	.10	.07	.00	.00	.00	.00	.17	.61	84	2.7	.49	.25
20	.10	.06	.00	.00	.00	.00	.17	.82	68	2.6	.45	.25
21	.10	.05	.00	.00	.00	.00	.17	1.2	65	2.4	.39	.25
22	.10	.05	.00	.00	.00	.00	.17	1.9	63	2.3	.35	.25
23	.10	.05	.00	.00	.00	.00	.17	2.4	57	2.2	.34	.25
24	.10	.05	.00	.00	.00	.01	.17	3.8	50	2.2	.38	.25
25	.10	.05	.00	.00	.00	.02	.17	9.3	43	2.1	.38	.25
26	.10	.05	.00	.00	.00	.03	.17	19	37	2.1	.37	.25
27	.10	.05	.00	.00	.00	.04	.17	20	30	2.0	.34	.25
28	.10	.05	.00	.00	.00	.05	.19	28	25	1.9	.34	.25
29	.10	.05	.00	.00	.00	.06	.33	38	22	1.9	.34	.25
30	.10	.05	.00	.00	---	.07	.36	40	20	1.8	.35	.25
31	.10	---	.00	.00	---	.08	---	48	---	1.7	.36	---
TOTAL	3.50	2.40	.41	.00	.00	.36	5.27	221.88	2613	173.6	20.11	8.05
MEAN	.11	.080	.013	.000	.000	.012	.18	7.16	87.1	5.60	.65	.27
MAX	.15	.10	.05	.00	.00	.08	.36	48	166	19	1.4	.35
MIN	.10	.05	.00	.00	.00	.00	.09	.34	20	1.7	.34	.25
AC-FT	6.9	4.8	.8	.00	.00	.7	10	440	5180	344	40	16

CAL YR 1979 TOTAL 3975.96 MEAN 10.9 MAX 180 MIN .00 AC-FT 7890
WTR YR 1980 TOTAL 3048.58 MEAN 8.33 MAX 166 MIN .00 AC-FT 6050

BEST DOCUMENT AVAILABLE

09303400 SOUTH FORK WHITE RIVER NEAR BUDGE'S RESORT, CO

LOCATION.--Lat 39°51'51", long 107°32'00", in NW¼SE¼ sec.19, T.2 S., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank on downstream side of Forest Service bridge, 300 ft (91 m) upstream from South Fork Campground, 10 mi (16.1 km) above mouth, and about 10.5 mi (17 km) southeast of Buford.

DRAINAGE AREA.--128 mi² (332 km²).

PERIOD OF RECORD.--May 1976 to current year.

REVISED RECORDS.--WDR CO-79-3: 1976(M), 1977, 78(P), 1978.

GAGE.--Water-stage recorder. Altitude of gage is 7,600 ft (2,316 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. No regulation or diversions above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,940 ft³/s (83.3 m³/s) June 14, 1978, gage height, 5.36 ft (1.634 m); minimum daily, 40 ft³/s (1.13 m³/s) Feb. 1 to Mar. 10, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,790 ft³/s (79.0 m³/s) at 2300 June 11, gage height, 5.26 ft (1.603 m); only peak above base of 500 ft³/s (14 m³/s); minimum daily, 40 ft³/s (1.13 m³/s) Feb. 1 to Mar. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	77	68	52	40	40	54	100	917	492	112	79
2	109	76	68	52	40	40	56	110	946	478	115	77
3	102	76	68	52	40	40	58	110	1030	436	111	76
4	101	76	68	50	40	40	60	120	980	389	118	75
5	101	76	68	50	40	40	62	120	1070	356	105	74
6	101	74	68	50	40	40	62	130	1290	272	102	74
7	100	74	68	49	40	40	62	130	1400	246	99	75
8	99	74	68	49	40	40	64	140	1450	239	95	76
9	100	74	68	48	40	40	64	150	1640	223	96	79
10	99	72	68	48	40	40	66	160	1880	210	95	80
11	99	72	66	47	40	41	66	170	1810	197	91	81
12	98	72	66	47	40	41	68	180	1590	191	90	79
13	99	72	66	46	40	41	68	190	1770	193	92	78
14	98	72	66	46	40	41	70	200	1660	190	97	75
15	100	72	64	45	40	41	72	210	1420	180	109	73
16	101	70	62	45	40	41	74	220	1270	165	121	72
17	101	70	62	45	40	41	76	230	1210	158	109	72
18	102	70	60	44	40	42	78	250	1160	150	99	71
19	103	70	60	44	40	43	80	280	1050	144	93	69
20	111	70	60	44	40	44	82	309	931	140	91	79
21	116	70	58	44	40	45	84	366	962	136	88	76
22	107	70	58	44	40	46	86	503	918	132	86	73
23	107	70	58	43	40	47	88	612	851	129	84	73
24	110	70	56	43	40	48	90	646	758	128	93	73
25	105	70	56	43	40	49	92	602	679	130	94	71
26	106	68	56	43	40	50	94	593	649	127	93	71
27	105	68	56	42	40	50	96	634	630	120	87	71
28	100	68	54	42	40	50	98	738	581	115	83	69
29	105	68	54	41	40	50	100	790	512	113	81	69
30	100	68	54	41	---	52	100	790	473	118	80	71
31	88	---	52	41	---	52	---	873	---	115	81	---
TOTAL	3176	2149	1924	1420	1160	1355	2270	10656	33487	6412	2990	2231
MEAN	102	71.6	62.1	45.8	40.0	43.7	75.7	344	1116	207	96.5	74.4
MAX	116	77	68	52	40	52	100	873	1880	492	121	81
MIN	88	68	52	41	40	40	54	100	473	113	80	69
AC-FT	6300	4260	3820	2820	2300	2690	4500	21140	66420	12720	5930	4430

CAL YR 1979 TOTAL 86284 MEAN 236 MAX 1830 MIN 52 AC-FT 171100
WTR YR 1980 TOTAL 69230 MEAN 189 MAX 1880 MIN 40 AC-FT 137300

NOTE.--NO GAGE-HEIGHT RECORD NOV. 2 TO MAY 14.

09303500 SOUTH FORK WHITE RIVER NEAR BUFORD, CO

LOCATION.--Lat 39°55'18", long 107°33'04", in NW¼SE¼ sec.36, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank at upstream side of county bridge, 10 ft (3 m) downstream from Peltier Creek, and 5.6 mi (9.0 km) southeast of Buford.

DRAINAGE AREA.--152 mi² (394 km²).

PERIOD OF RECORD.--August 1903 to October 1906, June 1910 to December 1915, October 1942 to September 1947, April 1967 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1057: 1944-45. WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,480 ft (2,280 m), from topographic map. July 26, 1903, to Oct. 31, 1906, nonrecording gage, and Oct. 1, 1942, to Sept. 30, 1947, water-stage recorder, at site 60 ft (18 m) upstream at different datums. Records for 1919-20 at site 6.0 mi (9.7 km) downstream not equivalent.

REMARKS.--Records good. Diversions for irrigation of about 600 acres (2.43 km²) of hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--26 years (water years 1904-6, 1911-15, 1943-47, 1968-80), 260 ft³/s (7.363 m³/s), 188,400 acre-ft (232 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 3,230 ft³/s (91.5 m³/s) June 17, 1906, gage height, 8.2 ft (2.50 m), site and datum then in use, from rating curve extended above 1,600 ft³/s (45 m³/s); minimum discharge recorded, 56 ft³/s (1.59 m³/s) Dec. 18, 1946, gage height, 1.01 ft (0.308 m), site and datum then in use, but may have been less during periods of no gage-height record.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,330 ft³/s (67.0 m³/s) at 0315 June 13, gage height, 6.62 ft (2.018 m), only peak above base of 1,200 ft³/s (34 m³/s); minimum daily, 79 ft³/s (2.24 m³/s) Jan. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	116	105	108	106	105	103	223	1020	592	169	26
2	130	126	102	112	115	105	94	212	1030	588	174	125
3	130	130	102	107	115	107	90	208	1110	556	167	125
4	128	138	106	111	112	105	90	208	1280	479	166	123
5	128	124	112	108	132	102	90	215	1470	423	160	121
6	126	120	115	107	126	103	90	238	1610	378	158	121
7	124	123	117	103	114	103	87	270	1680	354	155	123
8	123	121	119	103	133	102	85	282	1700	345	152	124
9	123	121	120	106	130	100	87	300	1750	321	150	126
10	124	119	125	101	124	101	90	300	1900	297	149	126
11	123	117	123	79	114	101	88	315	2070	279	145	129
12	123	119	97	106	115	106	87	324	2150	276	143	125
13	124	121	81	115	110	107	89	282	2140	285	145	124
14	124	120	90	120	111	115	93	262	1970	273	147	120
15	124	120	97	120	114	102	100	260	1760	248	158	119
16	123	120	103	138	114	97	102	268	1590	250	167	117
17	123	120	105	116	123	90	106	294	1500	225	159	117
18	124	120	102	125	111	106	117	270	1430	217	149	114
19	125	120	102	119	112	103	132	279	1420	210	143	112
20	124	121	106	120	111	103	143	315	1210	201	142	119
21	138	115	108	118	107	103	163	402	1200	196	140	117
22	125	116	112	120	110	100	181	560	1160	192	138	115
23	123	120	107	118	107	99	187	728	1120	187	136	112
24	125	101	101	117	110	96	186	798	1030	190	142	112
25	125	103	110	112	95	100	178	688	928	190	142	111
26	124	105	106	107	129	97	186	652	855	186	141	110
27	125	121	110	110	138	99	192	680	803	181	136	110
28	123	108	101	97	126	99	210	830	692	176	133	107
29	121	102	89	106	112	96	227	916	616	175	128	107
30	124	105	90	105	---	95	245	865	584	178	128	106
31	114	---	101	112	---	94	---	964	---	174	128	---
TOTAL	3873	3532	3264	3446	3376	3141	3918	13408	40778	8822	4590	3563
MEAN	125	118	105	111	116	101	131	433	1359	285	148	118
MAX	138	138	125	139	138	115	245	964	2150	592	174	129
MIN	114	101	81	79	95	90	85	208	584	174	128	106
AC-FT	7680	7010	6470	6840	6700	6230	7770	26590	80880	17500	9100	7030

CAL YR 1979 TOTAL 95448 MEAN 262 MAX 1930 MIN 78 AC-FT 189300
WTR YR 1980 TOTAL 95691 MEAN 261 MAX 2150 MIN 79 AC-FT 189800

09304000 SOUTH FORK WHITE RIVER AT BUFORD, CO

LOCATION.--Lat 39°58'28", long 107°37'30", in NW¼NE¼ sec.17, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 300 ft (91 m) downstream from highway bridge, 0.8 mi (1.3 km) upstream from mouth, and 1.0 mi (1.6 km) south of Buford.

DRAINAGE AREA.--177 mi^2 (458 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1919 to December 1920 (monthly discharge only, published in WSP 1313), October 1951 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,970 ft (2,124 m), from topographic map. Prior to Nov. 30, 1920, nonrecording gage at site 300 ft (91 m) upstream at different datum.

REMARKS.--Records fair. Diversions above station for irrigation of about 1,100 acres (4.45 km^2) above station and a small area below.

AVERAGE DISCHARGE.--30 years, 254 ft^3/s (7.193 m^3/s), 184,000 acre-ft/yr (227 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,000 ft^3/s (85 m^3/s) June 16, 1978; maximum gage height, 7.07 ft (2.155 m) June 30, 1957; minimum daily discharge, 60 ft^3/s (1.70 m^3/s) Feb. 21, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,220 ft^3/s (62.9 m^3/s) at 0300 June 14, gage height, 6.41 ft (1.954 m), only peak above base of 1,300 ft^3/s (37 m^3/s); minimum daily, 73 ft^3/s (2.07 m^3/s) Jan. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	92	100	100	110	103	94	249	1010	602	188	127
2	104	108	105	100	111	98	97	228	1000	607	187	126
3	104	105	110	99	110	105	95	225	1070	603	176	126
4	104	111	115	104	106	105	94	231	1210	552	170	123
5	104	104	118	103	95	103	95	237	1410	477	159	118
6	101	100	118	100	106	104	95	279	1490	430	159	112
7	95	103	123	101	105	103	95	312	1590	394	159	114
8	97	103	116	108	90	103	91	322	1620	366	155	116
9	99	103	120	103	81	100	95	332	1700	357	154	119
10	101	99	120	93	94	99	97	340	1700	318	154	118
11	104	101	103	73	100	98	93	370	1800	290	148	119
12	105	97	103	101	105	101	92	374	1900	295	144	115
13	106	92	103	103	114	95	92	329	1800	297	143	116
14	106	94	103	106	110	101	97	300	1940	288	147	114
15	108	99	103	105	110	101	101	291	1750	261	167	113
16	108	100	104	101	106	100	106	294	1580	242	174	113
17	106	103	104	103	104	90	110	332	1500	229	164	113
18	110	110	104	103	106	98	118	300	1440	222	152	112
19	106	105	104	100	106	101	129	303	1430	220	146	111
20	112	104	104	93	106	99	143	345	1220	218	144	119
21	117	93	105	94	104	98	165	434	1220	216	141	117
22	105	85	105	83	105	100	192	603	1190	215	138	115
23	106	86	105	79	105	99	200	791	1150	214	136	114
24	106	108	104	108	101	98	202	860	1070	212	146	116
25	105	110	120	122	90	101	192	731	974	212	142	117
26	105	108	128	110	98	98	202	669	898	208	140	116
27	105	104	120	110	104	93	208	702	849	205	137	114
28	104	98	115	99	103	99	228	861	745	200	133	114
29	108	81	110	104	110	97	252	940	666	193	129	113
30	105	93	105	95	---	94	276	867	611	187	128	114
31	95	---	100	87	---	97	---	962	---	191	128	---
TOTAL	3245	2999	3397	3090	2995	3081	4146	14413	39533	9521	4688	3494
MEAN	105	100	110	99.7	103	99.4	138	465	1318	307	151	116
MAX	117	111	128	122	114	105	276	962	1940	607	188	127
MIN	95	81	100	73	81	90	91	225	611	187	128	111
AC-FT	6440	5950	6740	6130	5940	6110	8220	28590	78410	18880	9300	6930

CAL YR 1979 TOTAL 104050 MEAN 285 MAX 2200 MIN 78 AC-FT 206400
WTR YR 1980 TOTAL 94602 MEAN 258 MAX 1940 MIN 73 AC-FT 187600

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO

LOCATION.--Lat 40°00'18", long 107°49'29", in NW¼NW¼ sec.3, T.1 S., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 40 ft (12 m) downstream from county road bridge, 2.3 mi (3.7 km) upstream from Coal Creek, and 5.0 mi (8.0 km) southeast of Meeker.

DRAINAGE AREA.--648 mi² (1,678 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,400 ft (1,951 m), from topographic map. Oct. 1, 1961, to Sept. 30, 1976, at site 76 ft (23 m) upstream at datum 2.0 ft (0.610 m) higher.

REMARKS.--Records good. Diversions above station for irrigation of about 8,000 acres (32.4 km²) above station and about 4,000 acres (16.2 km²) below.

AVERAGE DISCHARGE.--19 years, 546 ft³/s (15.46 m³/s), 395,600 acre-ft/yr (488 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,900 ft³/s (139 m³/s) May 29, 1979, gage height, 5.97 ft (1.820 m); minimum daily, 6.5 ft³/s (0.18 m³/s) July 19-21, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (57 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 24	0400	2,930	83.0	5.11	1.558	June 13	0600	*3,440	97.4	5.57	1.698

Minimum daily discharge, 151 ft³/s (4.28 m³/s) Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	267	259	268	293	276	271	900	2270	870	213	170
2	157	309	255	286	287	260	288	829	2110	980	227	171
3	172	297	255	288	280	272	282	862	2160	920	232	179
4	177	313	281	290	279	276	281	909	2310	760	242	199
5	189	305	306	290	261	271	286	969	2450	680	225	195
6	198	294	303	276	273	274	289	1090	2590	600	216	181
7	192	310	295	280	275	274	290	1270	2620	560	204	187
8	191	313	285	273	247	273	276	1310	2650	550	213	186
9	187	309	274	277	220	267	294	1390	2650	510	260	182
10	194	308	269	279	241	264	304	1350	2660	470	228	186
11	197	302	280	211	266	262	296	1500	2820	450	192	213
12	199	298	211	292	281	275	288	1500	3020	420	162	244
13	213	281	203	298	292	253	291	1260	3020	420	157	266
14	260	286	231	313	277	271	305	1150	2820	420	166	264
15	234	285	280	309	284	272	332	1110	2550	400	204	258
16	232	281	273	290	282	273	357	1140	2210	370	236	257
17	231	284	324	292	271	240	369	1300	2060	362	281	258
18	236	300	317	287	280	264	402	1140	1970	344	261	256
19	249	297	306	281	291	275	461	1200	1960	335	256	255
20	266	297	307	275	284	267	508	1400	1750	326	217	268
21	329	285	317	279	283	267	595	1660	1720	307	161	272
22	314	280	302	254	281	277	692	2120	1620	308	158	272
23	318	275	288	232	283	275	726	2570	1540	304	151	270
24	326	280	262	288	272	271	725	2670	1410	294	169	264
25	317	271	305	296	243	282	712	2230	1290	309	167	266
26	316	270	276	280	269	278	741	1930	1210	296	161	263
27	325	266	283	273	276	262	756	1910	1130	282	158	266
28	315	259	256	274	275	279	803	2140	990	268	156	259
29	330	258	232	277	292	278	895	2160	880	249	156	260
30	321	259	216	270	---	273	957	2200	800	253	156	267
31	286	---	264	237	---	282	---	2290	---	238	164	---
TOTAL	7633	8637	8515	8615	7938	8383	14072	47459	61240	13855	6149	7034
MEAN	246	288	275	278	274	270	469	1531	2041	447	198	234
MAX	330	313	324	313	293	282	957	2670	3020	980	281	272
MIN	157	258	203	211	220	240	271	829	800	238	151	170
AC-FT	15140	17130	16890	17090	15750	16630	27910	94130	121500	27480	12200	13950

CAL YR 1979 TOTAL 227457 MEAN 623 MAX 4520 MIN 135 AC-FT 451200
WTR YR 1980 TOTAL 199530 MEAN 545 MAX 3020 MIN 151 AC-FT 395800

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1978 to current year.
WATER TEMPERATURES: July 1978 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1978.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

COOPERATION.--Chemical quality data are furnished by Water and Power Resources Service.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 459 micromhos Sept. 19, 20, 1980; minimum, 152 micromhos June 14, 1980.
WATER TEMPERATURES: Maximum, 20.5°C Sept. 6, 1977, July 11, 20, 21, 28, 1980; minimum, 0.0°C many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 459 micromhos Sept. 19, 20; minimum, 152 micromhos June 14.
WATER TEMPERATURES: Maximum, 20.5°C July 11, 20, 21, 28; minimum, 0.0°C many days during November to April.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT										
04...	1025	168	419	8.2	6.5	210	91	66	12	3.9
NOV										
01...	1150	209	400	--	--	--	--	--	--	--
09...	1050	308	420	8.7	3.0	--	--	--	--	--
16...	1545	280	--	--	--	--	--	--	--	--
20...	1100	284	415	8.3	2.0	--	--	--	--	--
30...	1430	258	388	8.6	.0	200	96	62	11	4.1
DEC										
07...	1455	294	382	8.4	.0	190	88	58	11	3.2
13...	1100	203	360	8.3	.0	180	78	55	9.7	3.4
20...	1340	294	395	8.3	.0	200	93	63	11	3.7
28...	1400	256	404	8.3	.5	200	87	60	11	3.7
JAN										
04...	1000	290	373	8.2	.5	190	86	59	11	3.2
17...	1510	292	389	8.4	3.0	180	77	57	10	3.2
24...	1345	218	398	8.4	.0	210	92	64	11	3.7
31...	1535	263	417	8.4	.5	210	100	66	12	4.1
FEB										
08...	1315	262	368	8.5	.0	180	78	55	10	3.4
15...	1500	290	360	8.3	2.5	180	89	55	10	3.7
21...	1330	281	370	8.5	2.0	190	94	58	11	3.4
26...	1000	218	391	8.4	.0	200	91	62	11	3.7
MAR										
07...	1440	272	383	8.5	5.5	190	84	59	11	3.2
13...	1040	212	386	8.3	.0	190	83	57	11	3.7
27...	1525	218	405	8.0	5.0	200	98	62	12	4.1
APR										
03...	1410	278	385	7.6	6.5	200	88	60	11	3.7
09...	1130	298	392	7.7	5.5	200	91	61	11	3.7
18...	1600	402	430	--	12.0	--	--	--	--	--
28...	1345	638	298	8.2	8.5	140	64	43	8.1	3.0
MAY										
05...	1310	969	286	8.2	9.0	140	36	41	7.8	3.0
16...	1150	1120	278	8.4	7.0	140	33	41	7.8	2.5
27...	1415	1830	233	8.2	9.0	110	21	34	6.3	1.8
JUN										
03...	1100	2180	218	8.2	7.0	110	15	32	6.2	1.6
13...	1410	2980	185	7.5	9.5	88	11	26	5.5	1.4
20...	1325	1720	208	8.1	11.0	100	21	30	6.7	1.8
JUL										
01...	1445	840	265	8.2	16.0	130	29	38	7.8	2.8
09...	1125	525	323	8.1	14.5	150	48	47	9.0	4.1
14...	1040	430	334	8.4	13.5	170	57	51	9.6	3.7
22...	1415	322	362	8.4	18.5	180	55	54	10	4.4
29...	1450	260	395	8.4	17.5	200	76	60	11	4.8
AUG										
05...	1340	242	412	8.2	17.0	200	69	62	11	5.0
13...	1445	162	420	8.3	17.0	210	80	63	12	5.5
20...	1245	260	401	8.4	14.0	200	71	61	11	4.8
AUG										
29...	1455	150	402	8.3	15.5	210	88	65	12	4.6
SEP										
05...	1450	173	409	8.4	16.5	200	88	60	11	5.5
12...	1505	278	391	8.4	13.5	200	82	62	11	4.1
29...	1455	150	402	8.3	15.5	210	88	65	12	4.6
SEP										
05...	1450	173	409	8.4	16.5	200	88	60	11	5.5
12...	1505	278	391	8.4	13.5	200	82	62	11	4.1

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT										
04...	.1	1.6	150	0	123	90	.7	287	.39	130
NOV										
01...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
30...	.1	1.2	120	4	104	90	2.5	252	.34	176
DEC										
07...	.1	1.2	120	2	102	91	.4	250	.34	198
13...	.1	1.2	110	2	94	81	2.8	239	.33	131
20...	.1	1.2	130	2	109	99	2.5	271	.37	215
28...	.1	1.2	120	6	108	98	2.8	267	.36	185
JAN										
04...	.1	1.2	130	0	107	85	.0	256	.35	200
17...	.1	1.2	120	5	106	87	1.1	255	.35	201
24...	.1	1.2	130	4	113	97	.7	260	.35	153
31...	.1	1.2	120	7	110	100	2.5	308	.42	219
FEB										
08...	.1	1.2	120	1	100	90	1.8	249	.34	176
15...	.1	1.2	100	4	89	85	6.7	253	.34	198
21...	.1	1.2	110	4	96	98	1.1	243	.33	184
26...	.1	1.2	130	1	109	98	2.5	273	.37	161
MAR										
07...	.1	1.2	120	6	108	90	.4	271	.37	199
13...	.1	1.2	120	4	105	85	3.5	250	.34	143
27...	.1	1.2	130	0	107	95	1.8	281	.38	165
APR										
03...	.1	1.2	130	0	107	95	2.1	266	.36	200
09...	.1	1.2	130	0	107	89	2.1	259	.35	208
18...	--	--	--	--	--	--	--	--	--	--
28...	.1	1.2	94	0	77	72	1.4	202	.27	348
MAY										
05...	.1	1.2	120	0	98	49	1.8	176	.24	460
16...	.1	1.2	120	2	101	45	.4	183	.25	553
27...	.1	.8	110	0	90	29	1.1	148	.20	731
JUN										
03...	.1	1.2	110	0	90	24	.4	128	.17	753
13...	.1	.8	93	0	76	19	.4	120	.16	966
20...	.1	.8	99	0	81	22	.4	122	.17	567
JUL										
01...	.1	1.2	120	0	98	37	.4	172	.23	390
09...	.1	1.6	130	0	107	52	2.8	204	.28	289
14...	.1	1.2	130	2	110	60	1.8	182	.25	211
22...	.1	1.2	140	4	121	71	2.1	226	.31	196
29...	.1	1.2	140	2	119	80	2.1	260	.35	183
AUG										
05...	.2	1.6	160	0	131	87	2.1	262	.36	171
13...	.2	1.6	140	7	127	83	2.1	279	.38	122
20...	.1	1.6	130	12	127	85	1.4	274	.37	192
AUG										
29...	.1	1.2	140	5	124	94	1.4	273	.37	111
SEP										
05...	.2	1.2	130	0	107	100	1.4	264	.36	123
12...	.1	1.2	120	12	118	87	1.4	253	.34	190
29...	.1	1.2	140	5	124	94	1.4	273	.37	111
SEP										
05...	.2	1.2	130	0	107	100	1.4	264	.36	123
12...	.1	1.2	120	12	118	87	1.4	253	.34	190

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	410	---	---	391		---	406	271	192	266	---	---
2	411	393	---	379		---	396	280	195	270	419	---
3	412	391	---	379		---	400	277	189	269	439	---
4	406	387	---	375		---	413	271	---	275	438	---
5	403	386	382	373		---	411	267	---	280	427	---
6	---	387	379	---		---	408	251	---	285	438	---
7	405	389	383	---		---	402	237	---	293	423	---
8	406	386	386	369		---	403	236	---	296	411	418
9	404	383	385	370		---	403	232	---	296	406	419
10	401	380	389	323		---	402	241	---	301	407	424
11	400	382	386	323		---	397	231	---	306	414	425
12	399	383	385	319		---	400	236	---	313	420	432
13	398	390	420	336		---	401	262	160	312	426	437
14	395	390	420	343		---	401	268	156	316	428	443
15	394	387	410	355		---	397	268	164	324	435	449
16	393	387	399	354		---	388	260	170	332	414	453
17	392	387	396	304		---	387	249	176	336	412	452
18	---	382	396	---		---	378	263	181	336	418	451
19	---	374	399	---		---	367	254	184	334	417	456
20	---	377	395	---		---	359	234	197	334	415	447
21	---	383	388	---		---	347	218	196	332	426	432
22	---	399	381	---		---	321	206	196	339	424	435
23	---	407	378	---		---	314	191	196	349	423	441
24	---	392	389	---		---	306	195	200	352	412	440
25	---	386	388	---		418	309	206	210	350	412	432
26	---	383	386	---		407	304	215	218	358	419	424
27	---	---	388	---		405	297	212	223	363	421	423
28	---	---	385	---		404	284	203	233	367	417	419
29	390	---	395	---		405	271	201	248	371	418	409
30	385	---	405	---		407	266	204	260	---	---	408
31	---	---	405	---		398	---	192	---	---	---	---

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	.0	.0			---	---
2	12.0	7.5	3.5	.5	---	---	.0	.0			---	---
3	12.5	8.0	4.0	.5	---	---	.0	.0			---	---
4	---	---	4.5	2.0	---	---	.0	.0			---	---
5	---	---	4.5	2.0	1.0	.5	.0	.0			---	---
6	---	---	4.5	1.0	1.0	.5	.0	.0			---	---
7	12.0	7.0	4.5	3.0	1.0	.5	.0	.0			---	---
8	12.0	7.0	5.0	3.5	1.0	.5	.0	.0			---	---
9	11.0	7.0	4.0	2.5	2.5	1.0	.0	.0			---	---
10	10.5	6.0	3.5	1.5	2.0	1.0	1.0	.0			---	---
11	10.5	6.5	3.0	1.5	2.0	.5	1.0	.5			---	---
12	9.5	6.5	2.5	.5	1.0	.5	3.0	1.0			---	---
13	10.0	5.5	2.5	.5	1.0	.5	2.5	1.5			---	---
14	---	---	3.0	.5	.0	.0	3.0	1.0			---	---
15	---	---	3.0	.5	.0	.0	2.0	1.0			---	---
16	---	---	2.5	.5	.0	.0	3.0	1.0			---	---
17	---	---	2.5	.5	.0	.0	2.5	.5			---	---
18	---	---	3.0	2.0	.0	.0	---	---			---	---
19	---	---	2.0	1.0	.0	.0	---	---			---	---
20	---	---	1.5	.5	.0	.0	---	---			---	---
21	---	---	1.0	.0	.0	.0	---	---			---	---
22	---	---	1.0	.0	.0	.0	---	---			---	---
23	---	---	.5	.0	.0	.0	---	---			---	---
24	---	---	1.0	.5	.0	.0	---	---			---	---
25	---	---	1.0	.5	.0	.0	---	---			5.0	2.5
26	---	---	1.0	.5	.0	.0	---	---			6.0	.0
27	---	---	---	---	.0	.0	---	---			5.0	.0
28	---	---	---	---	.0	.0	---	---			3.5	.0
29	---	---	---	---	.0	.0	---	---			5.5	.0
30	---	---	---	---	.0	.0	---	---			3.5	.0
31	---	---	---	---	.0	.0	---	---			3.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.0	.0	8.0	6.0	9.0	6.0	17.0	13.0	---	---	---	---
2	4.5	1.0	12.0	5.5	11.5	6.0	15.5	11.5	---	---	---	---
3	8.0	.5	11.5	6.0	9.5	6.5	17.5	11.5	---	---	---	---
4	10.5	3.5	10.5	6.0	---	---	18.0	12.0	---	---	---	---
5	10.0	4.5	12.0	6.0	---	---	17.5	11.0	---	---	---	---
6	9.0	5.0	9.0	6.5	---	---	18.0	11.0	---	---	---	---
7	6.5	3.5	8.5	6.0	---	---	16.5	13.0	---	---	---	---
8	9.0	1.5	9.5	6.5	---	---	19.0	13.0	---	---	14.5	13.0
9	11.0	3.0	9.5	6.0	---	---	19.0	12.5	---	---	13.5	11.0
10	9.5	6.5	12.0	6.5	---	---	20.0	13.5	---	---	14.0	12.0
11	8.5	4.5	9.0	6.5	---	---	20.5	15.0	---	---	14.5	10.0
12	9.0	2.5	7.5	4.5	---	---	20.0	14.5	---	---	14.0	11.0
13	10.0	2.5	9.5	4.5	13.0	9.5	17.0	14.5	---	---	15.5	10.0
14	12.0	3.5	9.0	6.0	12.5	7.0	18.5	12.5	---	---	15.0	9.0
15	12.0	5.5	10.0	6.5	12.5	7.0	19.5	12.0	---	---	15.0	9.0
16	13.0	5.5	9.5	6.5	13.0	7.5	20.0	12.5	---	---	15.5	10.5
17	13.5	5.0	8.5	5.5	14.0	8.0	19.5	13.0	---	---	14.5	8.5
18	13.5	5.5	12.0	5.5	14.0	8.5	20.0	13.5	---	---	14.5	8.5
19	14.0	6.0	13.0	7.0	13.0	9.0	19.0	13.5	---	---	15.5	10.5
20	14.0	6.0	13.5	7.0	14.5	8.0	20.5	13.0	17.0	13.5	15.0	10.0
21	14.0	6.5	14.5	7.0	14.5	9.0	20.5	13.0	17.0	10.0	12.0	8.0
22	11.5	7.0	13.5	7.0	15.5	9.0	19.5	13.0	18.0	10.5	12.5	7.0
23	10.0	6.0	12.5	7.0	14.5	9.5	19.5	13.0	17.5	12.0	12.0	6.0
24	9.5	6.0	9.0	7.5	15.5	9.5	19.5	13.5	15.5	13.0	12.0	6.5
25	12.0	5.0	9.5	4.5	16.5	9.5	18.0	12.5	15.5	12.0	12.0	6.0
26	12.0	5.0	10.0	5.0	17.5	6.0	19.5	12.5	17.5	11.0	12.5	6.5
27	12.0	5.5	12.0	5.5	17.0	12.0	20.0	12.5	17.0	11.5	12.5	7.0
28	11.5	5.5	12.0	6.0	17.0	10.5	20.5	12.5	17.0	11.0	12.0	7.5
29	10.0	5.0	10.0	6.5	17.5	11.0	18.0	12.5	15.5	11.5	13.0	7.5
30	8.5	5.5	12.0	6.0	18.0	13.5	---	---	---	---	13.0	7.0
31	---	---	10.5	6.0	---	---	---	---	---	---	---	---

09304480 COAL CREEK BELOW LITTLE BEAVER CREEK, NEAR MEEKER, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°01'52", long 107°49'18", in NE¼NW¼ sec.28, T.1 N., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, 1.7 mi (2.7 km) upstream from mouth, 0.1 mi (0.2 km) downstream from Little Beaver Creek, and 4.6 mi (7.4 km) east of Meeker.

PERIOD OF RECORD.--July 1978 to current year.

COOPERATION.--Chemical quality data are furnished by Water and Power Resources Service.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS)	PH FIELD (UNITS)	TEMPER-ATURE, WATER (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT										
04...	1045	17	793	8.2	6.0	380	190	91	37	20
NOV										
01...	1400	E12	1000	8.1	2.5	--	--	--	--	--
06...	1010	3.2	1820	8.2	3.0	--	--	--	--	--
20...	1330	6.1	1290	8.0	2.0	--	--	--	--	--
30...	1415	E12	1660	8.1	.0	860	520	180	100	78
DEC										
07...	1440	E9.0	1710	8.1	.0	880	540	170	110	77
13...	1540	4.5	1710	8.0	.0	900	570	180	110	77
20...	1400	E3.0	1560	8.0	.0	830	500	170	99	68
28...	1420	5.0	1650	8.3	1.0	850	530	170	104	77
JAN										
04...	1030	4.0	1440	8.1	.5	750	440	150	90	64
17...	1410	--	1680	8.0	2.0	840	560	170	100	82
24...	1530	5.3	1700	8.1	1.5	860	550	180	100	78
31...	1450	7.8	1520	8.0	.5	780	470	160	93	66
FEB										
08...	1345	11	1510	8.2	.0	780	480	160	92	67
15...	1355	15	1290	7.7	2.0	600	410	120	74	59
26...	1030	17	1820	8.2	1.0	880	570	170	110	96
MAR										
07...	1415	8.0	1530	8.3	4.0	750	470	150	91	74
13...	1530	12	1860	8.7	4.0	930	630	190	110	99
20...	1130	13	1410	8.2	2.5	700	420	140	85	63
27...	1000	12	1900	8.2	7.0	970	680	190	120	110
APR										
03...	1600	13	1870	7.9	12.0	970	670	190	120	100
09...	1415	E12	1850	8.0	8.0	940	670	180	120	110
18...	1630	53	2150	--	12.0	--	--	--	--	--
28...	1500	68	765	8.0	11.0	340	190	77	36	32
MAY										
05...	1255	48	826	7.8	11.0	370	200	79	41	36
16...	1200	56	776	8.1	9.5	340	170	75	38	31
27...	1430	7.1	858	7.9	13.0	380	200	84	42	34
JUN										
03...	1135	2.5	900	7.9	13.0	420	230	91	46	38
13...	1430	12	645	7.9	20.0	320	160	78	31	16
20...	1340	3.7	736	7.7	19.5	390	190	90	40	18
JUL										
01...	1400	46	713	8.0	21.0	360	160	87	34	16
09...	1200	25	708	7.9	17.0	360	170	88	34	20
14...	1100	32	821	8.2	16.0	400	190	94	40	22
22...	1355	E20	682	8.2	21.0	350	170	91	30	16
29...	1505	E20	725	8.3	18.0	360	180	90	32	18
AUG										
05...	1400	E15	726	8.1	17.0	360	190	93	32	18
13...	1500	E18	746	8.1	19.5	370	190	95	32	16
20...	1315	E18	710	8.2	14.0	360	170	95	30	14
29...	1510	E18	699	8.2	16.0	390	200	99	34	15
SEP										
05...	1510	E18	680	8.3	17.5	350	180	90	30	14
12...	1410	19	668	8.2	16.0	360	180	93	30	14

E ESTIMATED.

09304480 COAL CREEK BELOW LITTLE BEAVER CREEK, NEAR MEEKER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
OCT										
04...	.4	2.3	230	0	189	220	8.5	547	.74	25.1
NOV										
01...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
30...	1.2	4.7	420	0	344	620	28	1330	1.81	--
DEC										
07...	1.1	3.9	410	0	336	660	32	1370	1.86	--
13...	1.1	3.9	400	0	328	630	32	1370	1.86	16.6
20...	1.0	3.9	400	0	328	590	29	1240	1.69	--
28...	1.1	3.9	380	6	322	630	37	1330	1.81	18.0
JAN										
04...	1.0	3.5	370	0	303	540	28	1150	1.56	12.4
17...	1.2	11	340	0	279	680	32	1350	1.84	--
24...	1.2	4.7	380	0	312	650	34	1350	1.84	19.3
31...	1.0	3.9	380	0	312	560	30	1220	1.66	25.7
FEB										
08...	1.0	4.3	360	0	295	560	30	1200	1.63	35.6
15...	1.0	13	240	0	197	500	22	977	1.33	39.6
26...	1.4	5.5	370	0	303	740	42	1460	1.99	67.0
MAR										
07...	1.2	4.7	340	2	283	580	32	1230	1.67	26.6
13...	1.4	5.5	360	0	295	760	42	1510	2.05	48.9
20...	1.0	4.7	340	0	279	540	28	1090	1.48	38.3
27...	1.5	6.2	350	0	287	840	41	1620	2.20	52.5
APR										
03...	1.4	5.9	360	0	295	800	43	1540	2.09	54.1
09...	1.6	6.6	340	0	279	820	40	1570	2.14	--
18...	--	--	--	--	--	--	--	--	--	--
28...	.8	4.3	190	0	156	240	14	554	.75	102
MAY										
05...	.8	3.9	200	0	164	270	14	588	.80	76.2
16...	.7	3.1	210	0	172	230	11	551	.75	83.3
27...	.8	3.1	220	0	180	260	17	611	.83	11.7
JUN										
03...	.8	3.5	230	0	189	300	16	642	.87	4.33
13...	.4	3.9	200	0	164	170	5.3	449	.61	14.5
20...	.4	3.5	240	0	197	230	5.7	540	.73	5.39
JUL										
01...	.4	3.1	240	0	197	190	5.3	495	.67	61.5
09...	.5	2.0	230	0	189	210	7.1	495	.67	33.4
14...	.5	3.5	250	0	205	250	9.9	544	.74	47.0
22...	.4	2.0	220	0	180	190	6.4	472	.64	--
29...	.4	2.3	200	7	176	210	11	503	.68	--
AUG										
05...	.4	2.0	210	0	172	230	4.2	505	.69	--
13...	.4	4.3	220	0	180	220	7.8	534	.73	--
20...	.3	2.3	230	0	189	200	4.2	505	.69	--
29...	.3	1.6	230	0	189	220	9.2	516	.70	--
SEP										
05...	.3	1.6	180	13	169	210	6.4	476	.65	--
12...	.3	2.0	210	0	172	220	5.7	471	.64	24.2

09304500 WHITE RIVER NEAR MEEKER, CO

LOCATION.--Lat 40°02'01", long 107°51'42", in NE¼ sec.30, T.1 N., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 1.0 mi (1.6 km) upstream from Curtis Creek and 2.5 mi (4.0 km) east of Meeker.

DRAINAGE AREA.--755 mi² (1,955 km²).

PERIOD OF RECORD.--June 1901 to December 1906, October 1909 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Meeker" 1901-13.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,300 ft (1,920 m), from topographic map. Prior to Oct. 31, 1906, and May 7 to Aug. 13, 1910, nonrecording gage, and Aug. 14, 1910, to Oct. 19, 1913, water-stage recorder, at site 2.5 mi (4.0 km) downstream at different datum. Oct. 20, 1913, to Sept. 30, 1971, water-stage recorder at present site, at datum 3.00 ft (0.914 m) higher prior to Oct. 1, 1933, and at datum 2.00 ft (0.610 m) higher thereafter.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversions above station for irrigation of about 12,000 acres (48.6 km²) above station and about 3,000 acres (12.1 km²) below. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--76 years, 620 ft³/s (17.56 m³/s), 449,200 acre-ft/yr (554 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 6,370 ft³/s (180 m³/s) June 16, 1921, gage height, 7.60 ft (2.316 m), present datum, from rating curve extended above 4,700 ft³/s (130 m³/s); minimum daily, 78 ft³/s (2.21 m³/s) July 16, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,100 ft³/s (59 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 24	0300	2,650	75.0	4.87	1.484	June 13	1000	*3,170	89.8	5.03	1.533
May 30	1100	2,120	60.0	4.41	1.344						

Minimum daily discharge, 237 ft³/s (6.71 m³/s) Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	290	365	340	340	300	316	350	963	2070	1000	314	258
2	300	405	340	370	295	316	352	884	1970	1170	325	246
3	310	394	340	370	300	317	353	916	1990	1070	310	254
4	300	412	370	370	305	325	356	970	2140	880	310	267
5	325	404	420	370	305	319	364	1020	2310	800	296	250
6	338	392	400	350	308	327	381	1160	2440	730	283	246
7	318	405	390	360	307	329	375	1340	2540	700	282	249
8	310	403	380	350	306	322	371	1360	2580	680	290	250
9	308	402	370	350	307	321	385	1420	2570	630	333	243
10	310	400	360	350	308	317	397	1360	2650	590	291	251
11	296	395	380	370	309	321	387	1500	2840	570	255	278
12	318	391	320	380	309	327	383	1480	2960	540	240	307
13	325	369	300	400	309	319	385	1230	2960	560	248	333
14	372	375	330	380	309	320	408	1120	2810	570	267	326
15	334	375	380	350	320	323	430	1090	2610	520	319	323
16	326	375	400	350	319	329	457	1140	2350	487	336	324
17	330	378	430	340	308	329	473	1310	2150	473	385	323
18	335	401	400	330	339	329	507	1150	2050	445	359	312
19	350	395	370	320	367	329	556	1210	2000	449	351	305
20	375	394	370	320	354	327	598	1420	1840	441	313	326
21	433	379	400	310	342	335	672	1710	1780	423	247	330
22	408	350	390	300	333	354	757	2090	1700	408	238	329
23	397	340	360	280	329	345	792	2420	1630	396	237	327
24	404	370	330	270	314	342	807	2420	1530	390	266	319
25	398	365	370	280	318	357	781	2040	1420	402	268	324
26	401	360	340	285	319	346	814	1830	1340	396	258	316
27	413	350	360	287	320	336	812	1850	1250	380	245	323
28	404	340	340	289	318	331	857	2060	1110	362	247	308
29	424	340	310	292	315	342	967	2140	1010	329	242	309
30	414	340	280	295	---	342	1050	1910	940	335	247	303
31	384	---	340	300	---	350	---	2090	---	334	254	---
TOTAL	10952	11364	11210	10308	9192	10242	16577	46603	61540	17460	8856	8869
MEAN	353	379	362	333	317	330	553	1503	2051	563	286	296
MAX	433	412	430	400	367	357	1050	2420	2960	1170	385	333
MIN	290	340	280	270	295	316	350	884	940	329	237	243
AC-FT	21720	22540	22240	20450	18230	20320	32880	92440	122100	34630	17570	17590

CAL YR 1979 TOTAL 273463 MEAN 749 MAX 4730 MIN 240 AC-FT 542400
WTR YR 1980 TOTAL 223173 MEAN 610 MAX 2960 MIN 237 AC-FT 442700

NOTE.--NO GAGE-HEIGHT RECORD NOV. 23 TO FEB. 14.

BEST DOCUMENT AVAILABLE

09304550 CURTIS CREEK NEAR MEEKER, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°02'22", long 107°52'53", in SE¼NW¼ sec.24, T.1 N., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, 0.6 mi (1.0 km) upstream from mouth, 1.6 mi (2.6 km) east of Meeker.

PERIOD OF RECORD.--July 1978 to current year.

COOPERATION.--Chemical quality data are furnished by Water and Power Resources Service.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT										
04...	1005	.08	6040	8.2	4.0	2300	1600	180	450	790
19...	1105	.07	--	--	5.0	--	--	--	--	--
NOV										
01...	1415	.06	--	--	.0	--	--	--	--	--
06...	0945	.06	--	--	1.0	--	--	--	--	--
20...	1430	.08	--	--	.0	--	--	--	--	--
30...	1405	.06	7750	8.0	.0	3300	2400	300	610	1100
DEC										
07...	1420	.09	7460	8.1	.0	3100	2300	280	580	1000
14...	1520	.06	6900	7.8	.0	3200	2400	300	590	1000
20...	1430	.06	6940	7.7	.5	3100	2300	300	580	1000
28...	1500	.08	6710	7.8	.0	2900	2100	280	540	990
JAN										
04...	1045	.06	6580	7.9	.5	2900	2100	270	530	980
17...	1320	.78	4440	8.0	.0	1700	1100	170	320	570
24...	1605	.28	5880	8.0	.0	2300	1600	220	430	790
30...	1515	.26	5290	8.0	.0	2200	1500	210	400	710
FEB										
08...	1430	.34	5810	8.1	.0	2400	1600	230	440	820
15...	1050	2.3	2880	8.1	.0	1100	610	110	200	340
21...	1410	E2.0	2300	8.3	.0	870	510	100	150	250
26...	1145	E1.5	5620	8.4	2.0	2300	1600	220	430	780
MAR										
07...	1400	E1.5	5810	8.3	6.0	2400	1700	230	440	830
13...	1620	E1.0	6490	8.3	4.0	2600	2000	250	490	900
20...	1025	.91	5780	8.2	3.0	2400	1700	220	440	770
27...	1500	1.4	4720	8.2	13.0	2000	1300	190	360	660
APR										
03...	1330	1.2	4290	7.9	13.0	1800	1200	160	330	590
09...	1440	2.4	3170	8.1	13.0	1200	720	120	230	390
18...	1515	3.9	2120	8.2	18.0	--	--	--	--	--
28...	1505	1.3	3880	7.8	19.0	1500	910	150	270	500
MAY										
05...	1240	1.4	4460	7.7	18.0	1700	1100	160	310	570
16...	1255	5.8	3040	8.3	15.0	1100	610	120	200	340
27...	1440	2.1	3070	8.0	20.5	1200	640	120	210	360
JUN										
03...	1150	1.3	3470	7.8	16.0	1300	760	120	250	440
13...	1445	.34	6130	8.1	25.0	2500	1900	190	490	850
20...	1400	.33	5850	7.6	25.0	2500	1900	200	490	870
JUL										
01...	1340	.34	6100	7.7	24.5	2500	1800	180	490	910
09...	1230	.23	6540	8.0	25.0	2500	1800	180	490	970
14...	1115	.24	6290	8.1	19.5	2500	1900	200	480	890
22...	1340	.21	6490	7.9	27.5	2400	1800	160	490	920
29...	1515	.20	4050	8.0	25.5	1500	940	110	300	520
AUG										
05...	1410	.20	3940	8.0	24.0	1500	880	120	280	510
13...	1515	.20	5810	8.0	24.0	2300	1600	160	450	810
20...	1330	.40	4030	8.3	21.0	1500	960	120	300	550
29...	1520	.52	3120	8.3	20.5	1200	630	100	220	400
SEP										
05...	1530	.24	4020	8.2	24.0	1600	990	130	300	520
12...	1350	.50	3360	8.3	8.2	1300	790	110	240	400

E ESTIMATED.

BEST DOCUMENT AVAILABLE

09304550 CURTIS CREEK NEAR MEEKER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	* CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT										
04...	7.2	21	810	0	664	3000	180	5650	7.6	1.2
15...	--	--	--	--	--	--	--	--	--	--
NOV										
01...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
30...	8.4	24	990	0	812	4440	340	7870	10.7	1.2
DEC										
07...	7.8	23	950	0	779	4100	330	7440	10.1	1.8
14...	7.7	20	940	0	771	4000	350	7640	10.4	1.2
20...	7.8	22	980	0	804	4000	350	7610	10.3	1.2
28...	8.0	20	980	0	804	3800	330	7140	9.7	1.5
JAN										
04...	8.0	22	960	0	787	3500	320	6950	9.4	1.1
17...	5.9	20	730	0	599	2100	180	3960	5.3	8.3
24...	7.1	19	890	0	730	3000	240	5520	7.5	4.1
30...	6.6	17	860	0	705	2600	210	4960	6.7	3.4
FEB										
08...	7.3	19	960	0	787	2900	260	5790	7.8	5.3
15...	4.5	16	590	0	484	1200	93	2440	3.3	15.2
21...	3.7	13	390	22	357	920	96	1820	2.4	--
26...	7.0	18	840	0	689	3000	270	5560	7.5	--
MAR										
07...	7.4	20	740	35	665	3000	290	5950	8.0	--
13...	7.6	25	770	26	675	3400	300	6400	8.7	--
20...	6.9	21	820	0	673	2900	260	5540	7.5	13.6
27...	6.5	20	750	0	615	2400	180	4610	6.2	17.4
APR										
03...	6.1	17	700	0	574	2100	180	3980	5.4	12.9
09...	4.8	14	640	0	525	1400	110	2680	3.6	17.4
18...	--	--	--	--	--	--	--	--	--	--
28...	5.6	16	700	0	574	1800	150	3410	4.6	12.0
MAY										
05...	6.1	18	700	0	574	2000	200	3940	5.3	14.9
16...	4.4	12	570	27	512	1200	120	2460	3.3	38.5
27...	4.6	13	640	0	525	1300	110	2520	3.4	14.3
JUN										
03...	5.3	13	690	0	566	1550	130	3060	4.1	10.7
13...	7.4	16	750	0	615	3300	250	6190	8.4	5.6
20...	7.5	22	790	0	648	3300	270	5750	7.8	5.1
JUL										
01...	8.0	17	810	0	664	3400	--	6380	8.6	5.8
09...	8.5	18	770	0	632	3400	270	6360	8.6	3.9
14...	7.8	20	740	0	607	3300	290	6350	8.6	4.1
22...	8.1	20	760	0	623	3500	220	6370	8.6	3.6
29...	5.8	14	700	0	574	1900	120	3520	4.7	1.9
AUG										
05...	5.8	16	700	0	574	1700	110	3330	4.5	1.8
13...	7.4	19	770	0	632	3100	170	5560	7.5	3.0
20...	6.1	15	700	0	574	2000	120	3640	4.9	3.9
29...	5.1	12	640	0	525	1400	99	2610	3.5	3.6
SEP										
05...	5.7	15	700	0	574	2000	120	3500	4.7	2.2
12...	4.9	16	530	26	478	1400	110	--	--	--

BEST DOCUMENT AVAILABLE

09304600 WHITE RIVER AT MEEKER, CO

LOCATION.--Lat 40°02'00", long 107°55'05", in SE¼NE¼ sec.27, T.1 N., R.94 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank at 10th Street bridge, 0.4 mi (0.6 km) upstream from Flag Creek, and 0.6 mi (1.0 km) downstream from Sulphur Creek.

DRAINAGE AREA.--808 mi² (2,093 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,200 ft (1,890 m), from topographic map.

REMARKS.--Records fair. Diversions above station for irrigation of about 3,000 acres (12.1 km²) above station and about 12,000 acres (48.6 km²) below.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,290 ft³/s (150 m³/s) May 29, 1979, gage height, 7.13 ft (2.173 m); maximum gage height, about 12.0 ft (3.66 m) Jan. 31, 1979, ice jam; minimum daily discharge, 224 ft³/s (6.34 m³/s) Sept. 17, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (56.6 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 24	2030	2,850	80.7	6.47	1.972	June 13	1100	*3,170	89.8	6.52	1.987

Minimum daily discharge, 226 ft³/s (6.40 m³/s) Aug. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	258	362	355	351	360	334	306	960	2260	1160	301	270
2	290	400	350	360	365	314	322	880	2180	1370	328	235
3	274	390	360	380	330	338	306	920	2210	1190	310	242
4	274	420	370	380	322	334	306	992	2350	1000	310	260
5	290	410	425	383	302	326	326	1050	2470	904	291	253
6	318	400	420	360	318	330	342	1130	2580	821	275	240
7	314	410	415	370	322	326	334	1300	2660	768	275	248
8	298	410	390	363	302	322	294	1330	2670	732	281	254
9	298	410	390	360	282	310	326	1410	2700	674	325	251
10	310	400	390	362	298	306	342	1390	2770	623	286	258
11	318	390	340	302	322	302	322	1560	2850	591	244	277
12	322	390	340	370	338	322	310	1590	2930	552	226	307
13	334	370	320	385	360	298	306	1380	2880	574	231	336
14	385	380	326	405	326	318	322	1260	2850	592	253	327
15	338	370	395	385	342	318	360	1180	2670	524	328	323
16	336	370	415	342	346	310	395	1230	2460	490	359	322
17	330	370	435	346	330	274	430	1390	2300	473	411	322
18	338	400	415	338	370	302	445	1270	2190	445	381	315
19	350	400	435	334	440	318	480	1310	2180	449	365	309
20	385	390	435	350	410	314	536	1500	2020	441	319	324
21	445	380	410	330	385	330	638	1760	1940	423	246	332
22	425	370	430	313	380	346	720	2190	1870	408	236	329
23	400	360	410	285	370	338	752	2560	1740	378	240	331
24	410	370	380	283	360	326	768	2600	1680	373	277	326
25	410	370	400	283	345	342	736	2280	1560	388	286	334
26	410	360	390	342	330	330	744	2040	1470	378	278	328
27	410	360	380	346	334	306	752	2000	1390	360	257	331
28	410	370	360	334	346	322	808	2160	1360	333	256	325
29	405	360	337	338	365	318	912	2290	1150	308	249	329
30	405	350	310	334	---	314	984	2110	1080	324	255	324
31	375	---	390	290	---	318	---	2230	---	312	265	---
TOTAL	10861	11470	11938	10757	10000	9906	14892	49252	65460	18358	8944	8962
MEAN	350	382	385	347	345	320	496	1589	2182	592	289	299
MAX	445	420	435	405	440	346	984	2600	2930	1370	411	336
MIN	258	340	310	280	282	274	296	880	1080	308	226	235
AC-FT	21540	22750	23680	21340	19830	19650	29540	97690	129800	36410	17740	17780

CAL YR 1979 TOTAL 263991 MEAN 723 MAX 4900 MIN 224 AC-FT 523600
WTR YR 1980 TOTAL 230730 MEAN 630 MAX 2930 MIN 226 AC-FT 457600

09304600 WHITE RIVER AT MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1978 to current year.
WATER TEMPERATURES: October 1978 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1978.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

COOPERATION.--Chemical quality data are furnished by the Water and Power Resources Service.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 810 micromhos Nov. 29, 1979; minimum, 208 micromhos May 24, 1979.
WATER TEMPERATURES: Maximum, 23.0°C July 21, 28, 30, 1980; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 810 micromhos Nov. 29; minimum, 221 micromhos June 13.
WATER TEMPERATURES: Maximum, 23.0°C July 21, 28, 30; minimum, 0.0°C on many days during October to February.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT										
04...	0950	274	670	8.3	.5	270	120	78	18	36
19...	1440	350	600	--	12.0	--	--	--	--	--
NOV										
01...	1330	310	--	--	1.0	--	--	--	--	--
09...	1125	318	--	--	1.5	--	--	--	--	--
20...	1500	262	--	--	2.0	--	--	--	--	--
30...	1450	320	680	8.5	.0	270	130	77	18	46
DEC										
07...	1530	395	582	8.5	.0	220	100	64	14	29
13...	1610	320	689	8.4	.0	260	120	76	17	43
20...	0930	410	580	7.9	.5	230	100	67	14	31
28...	1310	360	595	8.3	--	230	110	69	15	33
JAN										
04...	1000	435	549	8.2	1.0	220	110	66	14	28
17...	1425	338	607	8.3	3.0	230	120	67	16	30
24...	1300	286	615	8.3	.0	240	120	71	16	35
31...	1330	234	669	8.3	.5	260	120	74	17	42
FEB										
08...	1230	242	600	8.2	.0	240	120	70	16	34
15...	1115	319	576	7.7	3.0	240	110	67	17	33
21...	1530	390	657	8.3	4.5	260	130	69	20	38
26...	1345	274	677	8.4	3.0	270	140	74	21	42
MAR										
07...	1515	322	620	8.6	5.0	240	120	69	16	33
13...	0955	262	617	8.3	.0	240	110	69	16	35
20...	1445	310	613	8.6	8.0	250	120	70	18	32
27...	1140	290	632	8.3	4.5	260	130	74	19	38
APR										
03...	1130	300	641	7.8	4.5	260	140	73	19	36
09...	1330	310	676	7.8	8.5	290	160	78	23	37
18...	1430	425	840	8.0	12.0	--	--	--	--	--
28...	1040	825	439	8.2	7.5	180	75	53	12	15
MAY										
05...	1120	1000	383	8.0	8.5	160	64	47	11	14
16...	1130	1200	366	8.3	7.5	160	47	45	11	12
27...	1350	1940	281	8.2	9.5	130	35	37	7.9	7.4
JUN										
03...	1530	2190	264	8.1	10.5	120	28	35	7.6	6.4
13...	1350	3040	219	7.4	10.0	100	22	30	6.7	4.8
20...	1130	2050	264	7.9	11.0	120	28	34	8.1	6.9
JUL										
01...	1505	1100	373	8.2	17.0	160	48	47	11	12
09...	1020	696	461	8.0	15.5	200	71	58	14	18
14...	1015	596	523	8.3	14.5	220	75	63	16	21
22...	1320	400	533	8.4	20.0	240	84	68	16	24
29...	1430	300	584	8.3	19.5	250	91	72	16	27
AUG										
05...	1315	306	624	8.3	20.0	270	110	77	18	29
13...	1425	246	676	8.4	19.0	280	120	78	20	36
20...	1455	310	595	8.5	17.0	260	110	74	18	27
29...	1435	254	685	8.3	16.0	270	120	75	20	34
SEP										
05...	1415	278	606	8.4	17.0	250	120	69	18	33
12...	1420	355	578	8.5	16.0	250	110	71	17	28

09304600 WHITE RIVER AT MEEKER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT										
04...	1.0	2.3	180	1	151	130	44	443	.60	328
19...	--	--	--	--	--	--	--	--	--	--
NOV										
01...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
30...	1.2	2.0	160	4	138	150	57	436	.59	377
DEC										
07...	.9	1.6	130	4	114	120	37	359	.49	383
13...	1.2	2.0	150	7	136	140	56	440	.60	380
20...	.9	1.6	150	0	123	120	43	385	.52	426
28...	.9	1.6	140	4	123	120	44	392	.53	381
JAN										
04...	.8	1.6	140	0	115	120	36	363	.49	426
17...	.9	2.0	140	2	118	140	37	384	.52	350
24...	1.0	2.0	140	3	121	130	45	409	.56	316
31...	1.1	2.0	150	5	132	140	55	454	.62	287
FEB										
08...	1.0	2.0	150	0	123	110	44	382	.52	250
15...	.9	2.7	150	0	123	130	35	396	.54	340
21...	1.0	3.9	150	1	126	160	42	431	.59	454
26...	1.1	2.0	150	3	130	170	48	474	.64	351
MAR										
07...	.9	2.3	120	12	118	140	41	412	.56	358
13...	1.0	2.0	140	7	127	140	42	388	.53	274
20...	.9	2.0	130	11	125	140	41	405	.55	339
27...	1.0	2.0	150	3	129	160	42	447	.61	350
APR										
03...	1.0	2.0	150	0	123	160	41	426	.58	345
09...	.9	2.3	160	0	131	170	39	466	.63	370
18...	--	--	--	--	--	--	--	--	--	--
28...	.5	2.3	130	0	107	96	14	279	.38	621
MAY										
05...	.5	1.6	120	0	98	71	14	244	.33	659
16...	.4	1.6	130	2	111	65	12	237	.32	768
27...	.3	1.2	110	0	90	40	8.5	181	.25	948
JUN										
03...	.3	1.2	110	0	90	34	7.4	162	.22	958
13...	.2	1.2	98	0	80	24	3.9	147	.20	1210
20...	.3	1.2	110	0	90	37	7.4	159	.22	880
JUL										
01...	.4	1.6	140	0	115	62	13	233	.32	692
09...	.6	1.6	160	0	131	75	20	292	.40	549
14...	.6	2.0	170	5	148	98	23	294	.40	473
22...	.7	2.0	160	12	151	100	26	352	.48	380
29...	.7	2.0	160	14	155	110	32	393	.53	318
AUG										
05...	.8	1.6	170	12	159	140	33	407	.55	336
13...	.9	2.3	170	12	159	140	42	458	.62	304
20...	.7	2.0	150	14	146	120	29	408	.55	341
29...	.9	2.0	170	5	148	150	40	421	.57	289
SEP										
05...	.9	2.0	140	10	131	120	37	396	.54	297
12...	.8	2.3	140	13	136	130	35	377	.51	361

BEST DOCUMENT AVAILABLE

09304600 WHITE RIVER AT MEEKER, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	643	608	---	---	569	608	673	351	---	360	566	700
2	648	596	---	---	552	618	652	346	---	---	578	689
3	644	592	---	---	565	615	657	333	---	---	558	684
4	641	583	640	560	566	610	672	---	---	---	565	691
5	632	585	620	570	578	611	698	---	---	---	563	656
6	623	589	630	573	581	609	719	---	---	---	552	638
7	622	587	620	584	573	602	706	---	---	---	569	633
8	628	588	600	583	600	610	700	---	---	---	598	610
9	620	588	595	609	634	617	701	---	---	475	566	595
10	613	586	594	608	617	617	713	---	---	---	581	624
11	616	588	647	669	594	616	700	---	---	---	616	633
12	607	588	659	609	582	600	696	---	---	---	633	603
13	604	596	626	621	558	630	690	---	221	---	646	578
14	586	604	593	637	563	613	697	---	---	520	636	567
15	598	600	560	635	574	616	683	---	---	---	630	562
16	605	598	---	642	576	612	658	350	---	---	612	519
17	602	598	---	639	591	638	659	---	---	---	584	517
18	610	593	---	636	591	628	618	---	---	---	606	536
19	606	587	---	625	588	621	561	---	---	---	596	553
20	611	584	---	623	603	627	528	---	260	---	636	549
21	606	600	---	628	620	644	505	---	---	---	666	539
22	593	650	---	651	621	662	466	---	---	530	680	551
23	593	670	---	672	607	670	438	---	---	---	667	558
24	584	620	---	626	609	682	487	---	---	---	647	567
25	587	650	---	594	624	682	422	---	---	---	626	569
26	583	650	---	596	621	674	405	---	---	---	624	574
27	580	670	---	607	609	675	398	280	---	---	643	566
28	587	700	---	588	613	682	387	---	---	---	654	570
29	585	770	---	575	603	670	362	---	---	590	668	574
30	586	690	---	575	---	677	363	---	---	---	672	573
31	595	---	---	618	---	661	---	---	---	---	683	---

09304600 WHITE RIVER AT MEEKER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.0	7.5	1.0	.0	---	---	---	---	1.0	.5	6.0	1.0
2	14.0	7.5	3.0	.0	---	---	---	---	2.0	.0	4.0	1.0
3	14.5	7.5	3.0	.0	---	---	---	---	3.5	.5	4.5	2.5
4	13.0	5.5	3.5	.5	---	---	1.0	1.0	4.0	1.0	6.5	2.5
5	13.0	5.5	4.5	.5	.5	.0	1.5	1.0	2.5	.0	6.5	3.0
6	13.5	6.0	3.5	.0	.5	.0	1.0	1.0	2.5	.0	4.5	2.0
7	14.0	6.5	3.5	1.5	.5	.0	1.0	1.0	2.5	.0	5.5	1.0
8	13.5	6.5	4.5	1.5	2.0	.0	1.0	.5	.5	.0	6.5	2.0
9	12.5	6.5	3.0	1.0	2.5	.0	1.5	1.0	.0	.0	6.0	2.0
10	12.5	5.5	2.5	.0	2.0	.0	2.5	1.0	.5	.0	7.0	2.0
11	12.0	5.5	2.0	.0	.5	.5	1.0	1.0	.5	.0	5.0	1.5
12	10.5	5.5	2.0	.0	.5	.5	1.5	1.0	1.0	.5	5.0	.5
13	12.0	5.0	2.0	.0	.0	.0	4.0	1.5	1.0	.0	4.5	.5
14	9.5	6.0	2.5	.0	.0	.0	3.0	2.0	2.5	1.0	7.0	1.0
15	11.0	5.5	2.5	.0	.0	.0	3.0	2.0	4.5	2.5	6.5	3.0
16	12.0	7.0	2.5	.0	---	---	3.5	1.5	5.0	2.0	6.0	2.0
17	10.0	5.0	2.0	.0	---	---	3.5	1.5	4.5	3.0	6.0	1.0
18	10.0	7.0	2.5	.5	---	---	3.0	2.0	5.5	3.0	7.5	1.0
19	12.0	6.5	1.0	.0	---	---	1.5	.5	5.5	2.0	9.5	4.0
20	8.5	4.5	1.5	.0	---	---	1.0	.0	4.5	2.5	9.5	4.0
21	5.0	3.0	1.0	.0	---	---	.5	.0	5.0	2.0	9.5	4.0
22	5.0	1.0	.0	.0	---	---	.0	.0	5.5	2.0	8.5	5.0
23	6.5	1.5	.0	.0	---	---	.0	.0	3.0	1.5	7.5	4.5
24	6.5	2.5	.5	.0	---	---	.0	.0	4.0	.5	8.5	4.0
25	8.5	3.0	1.0	.0	---	---	.0	.0	3.0	.5	6.0	3.5
26	9.0	4.5	.5	.0	---	---	.5	.0	4.5	.0	8.0	2.0
27	8.5	4.5	.5	.0	---	---	.5	.0	6.0	.5	8.0	1.5
28	6.0	2.5	.0	.0	---	---	.5	.0	6.0	1.0	6.0	3.0
29	5.0	3.0	.0	.0	---	---	2.0	.5	5.0	2.5	7.5	2.5
30	4.5	1.5	.0	.0	---	---	1.0	.5	---	---	4.5	2.5
31	2.5	.0	---	---	---	---	.5	.5	---	---	5.5	1.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	1.0	9.0	7.0			---	---	20.0	15.0	17.0	11.5
2	5.5	3.0	11.5	6.5			---	---	22.0	14.5	17.5	12.0
3	7.5	2.0	11.5	7.5			---	---	19.5	14.0	18.0	13.0
4	11.0	5.0	---	---			---	---	20.0	12.0	19.0	13.0
5	10.5	5.5	---	---			---	---	19.5	12.0	19.0	13.5
6	8.5	5.5	---	---			---	---	20.5	12.5	19.5	14.5
7	6.5	3.5	---	---			---	---	22.0	13.5	18.0	15.5
8	8.5	1.5	---	---			---	---	21.0	14.0	17.0	15.0
9	10.0	4.0	---	---			---	---	20.5	15.0	16.0	13.0
10	8.5	6.0	---	---			---	---	21.5	14.0	16.5	14.0
11	8.5	4.5	---	---			21.0	18.5	21.5	12.5	16.0	12.5
12	8.5	3.0	---	---			22.0	15.5	19.5	12.5	17.0	13.0
13	9.5	3.0	---	---			19.0	15.5	19.0	13.5	18.0	12.0
14	11.5	4.0	---	---			21.0	14.0	20.0	13.5	17.0	11.5
15	11.0	6.0	---	---			22.0	13.0	19.0	15.0	16.5	11.5
16	12.0	5.5	---	---			22.5	13.5	18.5	13.0	18.0	3.0
17	13.0	5.0	---	---			22.5	14.0	18.0	11.5	17.0	11.0
18	13.0	6.0	---	---			22.0	14.5	18.5	12.0	17.0	10.5
19	12.5	6.0	---	---			21.5	14.0	17.5	12.5	15.5	13.0
20	13.5	6.5	---	---			22.5	14.0	19.0	11.5	17.5	12.0
21	13.5	7.0	---	---			23.0	14.0	18.5	11.0	13.5	10.5
22	12.0	8.0	---	---			21.0	14.0	18.5	11.5	15.0	8.5
23	10.5	6.0	---	---			22.0	15.0	18.5	13.5	14.0	8.0
24	10.0	6.5	---	---			21.5	15.0	17.0	14.5	14.5	8.5
25	12.0	5.0	---	---			21.0	13.5	17.5	13.5	14.0	8.0
26	12.0	6.0	---	---			22.5	13.5	19.5	13.0	14.5	8.0
27	12.0	6.5	---	---			22.5	14.0	18.5	13.5	14.5	9.0
28	9.5	6.5	---	---			23.0	14.0	19.0	13.0	14.0	9.0
29	11.0	7.5	---	---			20.5	13.5	17.5	14.0	14.5	9.5
30	9.0	6.5	---	---			23.0	14.5	15.0	12.5	14.5	9.0
31	---	---	---	---			21.0	15.0	15.5	12.0	---	---

09304800 WHITE RIVER BELOW MEEKER, CO

LOCATION.--Lat 40°00'48", long 108°05'33", in center of sec.31, T.1 N., R.95 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 30 ft (9 m) downstream from county bridge, 4.5 mi (7.2 km) downstream from Strawberry Creek, and 10 mi (16 km) west of Meeker.

DRAINAGE AREA.--1,024 mi² (2,652 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,928 ft (1,807 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversion above station for irrigation of about 22,000 acres (89.0 km²) above station and a few small hay meadows below.

AVERAGE DISCHARGE.--19 years, 621 ft³/s (17.59 m³/s), 449,900 acre-ft/yr (555 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,750 ft³/s (135 m³/s) June 17, 1978, gage height, 4.46 ft (1.359 m); minimum daily, 85 ft³/s (2.41 m³/s) June 28, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 2,000 ft³/s (57 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 24	0700	*3,090	87.5	3.61	1.100	June 13	1200	3,050	86.4	*3.64	1.109
May 29	0600	2,380	67.4	3.18	0.969						

Minimum daily discharge, 266 ft³/s (7.53 m³/s) Aug. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	303	380	350	360	380	326	321	1030	2080	1020	327	361
2	312	420	350	390	385	303	358	912	1980	1300	364	352
3	326	415	360	390	350	321	335	931	1910	1230	335	331
4	316	442	400	390	340	326	337	986	2040	996	334	345
5	345	425	440	390	330	330	358	1040	2200	889	318	337
6	365	405	430	370	340	330	383	1140	2320	782	309	337
7	365	425	420	380	340	330	373	1330	2390	742	302	313
8	345	420	410	370	320	326	322	1370	2410	707	296	334
9	340	415	400	370	300	321	359	1450	2400	660	343	341
10	345	410	390	370	310	321	392	1410	2390	643	341	350
11	350	405	420	294	340	321	369	1560	2470	625	287	385
12	365	395	285	390	360	340	351	1620	2730	582	272	384
13	365	380	321	400	390	340	347	1360	2810	606	266	411
14	415	390	335	420	360	335	363	1220	2690	664	298	388
15	385	390	410	400	370	335	406	1170	2430	599	366	384
16	375	390	442	380	380	350	438	1150	2250	539	420	396
17	380	385	448	380	370	298	457	1400	2050	502	455	389
18	395	420	405	360	410	316	495	1250	1960	470	450	379
19	415	410	405	350	520	350	562	1240	1910	464	416	369
20	460	415	442	340	490	347	619	1420	1770	459	428	364
21	550	390	448	340	410	355	716	1680	1720	437	338	380
22	502	380	460	330	365	387	836	2140	1650	386	309	377
23	466	360	460	310	340	372	862	2540	1580	385	316	379
24	472	380	405	290	303	358	867	2690	1490	384	349	364
25	466	380	502	290	273	381	811	2240	1400	402	375	366
26	460	370	425	350	285	363	832	1930	1330	390	393	360
27	454	360	430	360	316	327	846	1890	1220	364	365	361
28	448	360	370	350	335	352	909	2120	1110	364	362	357
29	460	350	350	350	370	341	1010	2330	1030	331	348	346
30	460	350	330	350	---	333	1090	2030	969	348	344	342
31	415	---	360	310	---	341	---	2090	---	347	350	---
TOTAL	12420	11817	12403	11124	10382	10476	16724	48669	58689	18617	10776	10882
MEAN	401	394	400	359	358	338	557	1570	1956	601	348	363
MAX	550	442	502	420	520	387	1090	2690	2810	1300	455	411
MIN	303	350	285	290	273	298	321	912	969	331	266	313
AC-FT	24640	23440	24600	22060	20590	20780	33170	96530	116400	36930	21370	21580

CAL YR 1979 TOTAL 264394 MEAN 724 MAX 3890 MIN 242 AC-FT 524400
WTR YR 1980 TOTAL 232979 MEAN 637 MAX 2810 MIN 266 AC-FT 462100

BEST DOCUMENT AVAILABLE

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1978 to current year.
WATER TEMPERATURES: July 1978 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1978.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

COOPERATION.--Additional chemical quality data are furnished by Water and Power Resources Service (noted by an asterisk in the water year heading).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 858 micromhos Apr. 15, 1979; minimum, 221 micromhos June 13, 1980.
WATER TEMPERATURES: Maximum, 25.0°C Aug. 7, 1978, Aug. 7, 1980; minimum, 0.0°C many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 853 micromhos Apr. 10; minimum, 221 micromhos June 13.
WATER TEMPERATURES: Maximum, 25.0°C Aug. 7; minimum, 0.0°C many days during November to March.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
NOV												
06...	1501	400	609	8.6	5.5	12.0	K22	K4	--	240	110	67
30...	1325	E300	750	8.4	.0	11.0	--	--	--	300	140	87
MAR												
18...	1430	355	678	8.4	6.0	11.6	--	K8	K7	270	150	75
APR												
17...	1325	460	742	8.0	11.5	10.0	K160	K60	--	290	160	74
JUN												
03...	1430	1900	280	7.7	10.5	7.1	--	--	--	120	31	34
AUG												
29...	1345	355	750	8.2	16.0	10.0	--	--	--	320	130	87
SEP												
30...	1410	345	676	8.3	14.0	10.8	--	K53	--	270	120	76

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
NOV											
06...	17	29	.8	1.4	130	130	30	.2	13	366	.50
30...	21	38	.9	2.3	160	160	45	.2	17	467	.64
MAR											
18...	21	42	1.1	1.5	120	160	36	.2	16	424	.58
APR											
17...	25	38	1.0	2.3	130	200	28	.2	14	460	.63
JUN											
03...	8.5	7.8	.3	1.0	89	40	6.5	.1	11	163	.22
AUG											
29...	26	40	1.0	2.0	190	160	34	.3	15	479	.65
SEP											
30...	20	34	.9	1.7	150	160	36	.2	14	433	.59

E ESTIMATED.
K BASED ON NON-IDEAL COLONY COUNT.

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
NOV											
06...	395	.00	.000	.39	.39	.39	.020	30	20	7.7	--
30...	E378	.04	.010	.71	.72	.76	.030	40	100	24	6.4
MAR											
18...	406	.00	.000	.40	.40	.40	.000	30	270	6.7	4.9
APR											
17...	571	.37	.120	1.1	1.20	1.6	.270	250	< 10	--	9.2
JUN											
03...	836	.20	.030	2.7	2.70	2.9	.130	80	10	8.0	4.1
AUG											
29...	459	.00	.040	.54	.58	.58	.040	60	10	5.0	6.1
SEP											
30...	403	.02	.000	.26	.26	.28	.010	20	10	1.5	2.9

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
JUN										
03...	1430	520	20	2	1	0	30	0	< 1	1
SEP										
30...	1410	40	0	1	2	100	30	0	< 1	0

DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)
JUN									
03...	1	0	0	2	< 3	6	3	5	3
SEP									
30...	< 1	0	10	0	< 3	10	3	6	1

DATE	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)
JUN									
03...	0	< 4	60	7	.1	.0	0	< 10	7
SEP									
30...	10	10	20	10	.0	.0	0	2	2

E ESTIMATED.

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)
JUN									
03...	1	1	1	250	270	1.0	20	< 3	.00
SEP									
30...	1	1	1	700	750	1.0	40	< 3	.00

DATE	TIME	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	BIOMASS CHLORO-PHYLL RATIO PERI-PHYTON (UNITS)
AUG						
13...	1355	91.0	96.9	6.00	.580	983
SEP						
30...	1410	.787	.945	.270	.060	585

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
MAR				
18...	1430	355	21	20
APR				
17...	1510	460	282	350
JUL				
14...	1430	690	73	136
AUG				
29...	1355	350	56	53
SEP				
30...	1350	345	28	26

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980*

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
OCT										
04...	0915	300	753	8.2	8.0	310	130	85	24	40
19...	1310	400	690	8.3	10.5	--	--	--	--	--
NOV										
01...	1300	380	625	8.4	2.0	--	--	--	--	--
09...	0920	395	690	8.3	2.0	--	--	--	--	--
20...	0945	400	600	8.2	.0	--	--	--	--	--
30...	1326	400	668	8.3	.0	290	140	82	20	40
DEC										
06...	1030	430	600	8.2	.0	240	110	67	17	31
13...	1345	320	695	8.0	.0	280	130	79	19	38
20...	1545	440	615	8.0	.5	250	110	71	17	33
28...	1020	400	607	8.2	.5	240	110	68	17	32
JAN										
04...	1115	390	585	8.1	.0	240	110	69	17	31
18...	1340	360	655	8.1	.5	260	120	71	19	36
24...	1130	290	661	8.1	.0	270	130	79	18	34
31...	1205	310	647	8.2	.5	260	120	75	18	37
FEB										
08...	1200	320	593	8.2	.0	240	110	69	16	34
15...	1355	370	576	7.7	.0	240	110	67	17	33
21...	1225	410	662	8.1	.0	270	130	72	21	41
26...	0920	316	633	8.3	1.0	280	140	77	20	36
MAR										
13...	0915	320	651	8.3	.0	270	150	73	20	36
20...	1410	430	677	8.4	8.5	280	140	75	22	39
27...	1320	330	699	8.3	7.0	290	120	76	24	44
APR										
03...	1515	330	704	8.3	7.5	280	150	74	23	42
09...	1025	350	760	8.1	5.5	310	160	81	26	40
28...	1345	940	436	8.1	12.5	190	78	54	14	18
MAY										
05...	0945	1100	414	8.0	9.5	180	69	49	13	17
16...	1100	1200	405	8.2	9.0	170	52	47	12	14
27...	1315	1900	298	8.1	9.5	130	34	39	8.5	8.3
JUN										
13...	1320	3100	241	8.2	11.0	110	20	31	7.4	6.0
20...	1045	3540	295	7.9	11.0	130	32	37	9.7	9.1
JUL										
01...	1530	1080	424	8.2	19.0	190	61	54	14	16
09...	0950	683	520	8.0	16.0	230	71	62	17	23
14...	0945	690	606	8.3	15.0	260	89	70	21	26
22...	1300	400	637	8.3	20.0	270	100	75	21	30
29...	1405	330	667	8.4	21.0	290	100	78	22	36
AUG										
05...	1220	321	710	8.2	20.5	300	110	81	23	38
20...	1530	448	670	8.5	18.0	280	110	75	22	36
29...	1346	355	703	8.3	16.0	320	130	86	25	38
SEP										
05...	1345	350	700	8.4	17.0	300	120	81	24	38
12...	1255	390	682	8.3	15.5	300	130	82	24	36

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO3)	CAR-BONATE (MG/L AS CO3)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT										
04...	1.0	3.1	220	0	180	160	40	510	.69	413
19...	--	--	--	--	--	--	--	--	--	--
NOV										
01...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--
30...	1.0	2.3	170	3	144	170	43	463	.63	500
DEC										
06...	.9	1.6	160	0	131	130	36	387	.53	449
13...	1.0	2.3	180	0	148	160	43	462	.63	399
20...	.9	2.0	170	0	139	140	35	407	.55	484
28...	.9	1.6	160	0	131	130	37	395	.54	427
JAN										
04...	.9	2.0	160	0	131	136	35	392	.53	413
18...	1.0	2.3	170	0	139	150	36	431	.59	419
24...	.9	2.3	170	0	139	160	37	446	.61	349
31...	1.0	2.3	170	0	139	150	39	446	.61	373
FEB										
08...	1.0	2.0	160	0	131	130	38	389	.53	336
15...	.9	2.7	150	0	123	130	35	396	.54	396
21...	1.1	3.5	170	0	139	170	39	440	.60	487
26...	.9	2.0	162	2	137	160	37	456	.62	389
MAR										
13...	1.0	2.0	140	3	120	160	39	434	.59	375
20...	1.0	2.3	150	12	143	160	41	461	.63	535
27...	1.1	2.3	160	21	166	180	41	494	.67	440
APR										
03...	1.1	2.7	150	6	135	180	42	471	.64	420
09...	1.0	2.3	180	0	148	200	36	525	.71	496
28...	.6	2.3	140	0	115	100	18	304	.41	772
MAY										
05...	.6	1.6	130	0	107	80	14	261	.35	775
16...	.5	2.0	140	0	115	75	12	258	.35	836
27...	.3	1.2	120	0	98	45	8.9	185	.25	949
JUN										
13...	.3	1.2	107	0	88	28	4.2	157	.21	1310
20...	.3	1.2	122	0	100	45	7.4	176	.24	1600
JUL										
01...	.5	2.0	160	0	131	75	13	281	.38	819
09...	.7	2.0	187	0	153	95	18	329	.45	607
14...	.7	2.3	190	10	172	120	22	363	.49	676
22...	.8	2.3	210	1	174	120	27	415	.56	448
29...	.9	2.3	200	11	182	140	32	462	.63	412
AUG										
05...	1.0	2.0	230	0	189	140	34	469	.64	406
20...	.9	2.0	180	12	168	160	30	457	.62	553
29...	.9	2.3	220	5	189	160	35	495	.67	474
SEP										
05...	1.0	2.3	190	15	181	170	34	467	.64	441
12...	.9	2.3	188	13	176	164	33	465	.63	490

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	754	---	702		---	647	734	428	276	414	---	700
2	751	---	---		---	655	743	435	282	461	---	702
3	734	---	---		---	632	730	432	276	454	---	699
4	720	---	---		---	645	732	419	263	448	---	675
5	706	---	---		---	651	755	405	252	454	---	671
6	688	---	---		---	634	788	377	243	463	739	683
7	682	---	---		---	638	780	355	241	479	741	702
8	688	---	---		---	650	747	353	243	491	752	701
9	680	---	---		---	663	803	347	245	498	735	699
10	667	---	---		---	670	806	346	243	514	727	699
11	665	---	---		---	662	789	340	237	515	743	689
12	655	---	---		---	639	771	358	230	532	758	685
13	671	---	---		---	---	759	397	227	538	777	671
14	649	---	---		---	670	761	397	230	559	770	654
15	645	---	---		---	709	752	404	237	553	769	648
16	650	---	---		---	695	709	390	250	561	752	639
17	648	---	---		---	678	688	417	261	566	708	632
18	647	---	---		528	673	668	410	268	579	694	634
19	641	---	---		553	677	629	392	269	577	691	636
20	634	585	---		581	678	592	355	281	576	674	635
21	---	594	---		645	696	549	321	285	583	733	618
22	---	620	---		669	720	504	291	287	600	766	621
23	---	655	---		652	728	495	273	293	610	767	624
24	---	627	---		623	719	495	269	302	619	761	635
25	---	593	---		626	720	491	288	324	615	745	630
26	---	591	---		622	692	475	309	334	620	751	633
27	---	602	---		633	734	455	312	340	631	753	632
28	---	606	---		645	760	437	292	360	636	728	631
29	---	650	---		647	730	411	278	386	664	718	638
30	---	693	---		---	732	418	292	407	---	717	633
31	---	---	---		---	719	---	278	---	---	710	---

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.0	9.5	---	---	.0	.0	.5	.0	1.0	.5	7.0	2.0
2	15.5	9.5	---	---	.0	.0	---	---	1.0	.5	5.0	2.0
3	15.0	10.0	---	---	.5	.0	.5	.0	.5	.5	4.5	3.0
4	14.0	8.0	---	---	.0	.0	.5	.0	.5	.5	6.5	3.5
5	14.0	8.0	---	---	.5	.0	.0	.0	.5	.5	7.0	4.0
6	14.5	8.0	---	---	---	---	.5	.0	.5	.0	4.0	1.5
7	14.5	8.5	---	---	---	---	.5	.0	.0	.0	5.5	3.5
8	14.5	8.5	---	---	.5	.0	.5	.0	.0	.0	7.0	3.5
9	13.5	8.5	---	---	.5	.0	.5	.0	.0	.0	7.5	2.5
10	13.5	7.5	---	---	---	---	.5	.0	.0	.0	8.0	2.5
11	13.0	8.0	---	---	.0	.0	.5	.0	.0	.0	5.5	2.0
12	12.0	8.0	---	---	---	---	---	---	.0	.0	6.0	.0
13	12.5	7.0	---	---	.0	.0	.5	.0	.0	.0	---	---
14	10.0	8.0	---	---	.0	.0	.5	.0	.0	.0	7.5	5.5
15	12.0	7.0	---	---	.0	.0	.5	.0	.0	.0	7.5	4.0
16	13.5	8.5	---	---	.0	.0	---	---	.0	.0	7.0	3.0
17	11.0	7.0	---	---	.0	.0	.5	.0	1.5	.0	6.0	.5
18	11.5	8.5	---	---	.0	.0	---	---	3.5	1.5	7.5	1.0
19	13.0	9.0	---	---	.0	.0	---	---	4.5	1.5	9.0	3.5
20	11.0	7.0	1.5	.5	.0	.0	---	---	3.5	1.5	9.5	4.0
21	---	---	1.0	.0	---	---	---	---	5.0	1.0	9.5	4.0
22	---	---	.0	.0	.0	.0	.5	.0	5.5	2.0	7.5	5.5
23	---	---	.0	.0	---	---	.5	.0	3.5	.5	8.0	4.5
24	---	---	.5	.0	.5	.0	.0	.0	4.0	.5	8.5	4.0
25	---	---	.5	.0	.0	.0	.0	.0	3.5	.5	6.5	3.5
26	---	---	.5	.5	.5	.0	---	---	5.5	1.0	7.5	1.5
27	---	---	.5	.0	.5	.0	---	---	7.0	1.5	8.0	1.5
28	---	---	.0	.0	.5	.0	---	---	7.0	2.0	5.5	3.0
29	---	---	.0	.0	.5	.0	---	---	6.0	3.0	7.0	2.0
30	---	---	.0	.0	.5	.0	---	---	---	---	4.5	1.0
31	---	---	---	---	.5	.0	1.0	1.0	---	---	5.0	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.0	.5	11.0	9.5	8.5	8.0	20.5	16.5	---	---	16.5	10.0
2	5.5	2.5	11.5	8.0	11.0	7.0	18.0	16.0	---	---	17.0	11.0
3	7.5	1.5	13.0	9.0	12.0	10.5	20.0	14.5	---	---	18.0	12.0
4	9.0	4.5	13.0	9.5	12.0	8.5	20.5	15.5	---	---	18.5	12.0
5	10.0	5.5	13.0	9.0	12.5	8.5	20.0	14.0	---	---	18.5	12.5
6	7.5	5.5	11.5	9.0	12.0	8.5	20.0	13.5	24.5	17.5	18.5	14.0
7	6.5	3.5	10.0	8.5	12.5	8.5	18.5	15.5	25.0	18.0	17.5	15.0
8	8.0	1.0	10.5	8.5	13.0	9.0	20.5	15.5	24.0	18.0	16.5	14.0
9	9.5	3.5	10.0	8.5	14.0	9.5	21.0	15.5	23.0	18.5	15.0	13.0
10	8.5	6.0	11.5	8.0	14.5	10.0	21.0	16.5	23.0	17.0	15.0	13.5
11	7.0	4.5	10.5	8.5	14.0	10.5	21.5	17.0	22.5	15.5	16.0	11.0
12	8.5	2.5	8.5	6.5	14.0	10.0	21.0	17.0	20.0	14.5	17.0	12.5
13	9.5	2.5	9.5	5.5	14.0	10.0	19.5	17.0	20.0	15.0	16.5	11.5
14	11.5	4.0	10.0	8.0	13.5	10.0	20.0	15.0	20.5	15.0	16.0	11.0
15	11.0	6.0	12.0	8.0	14.0	10.0	21.5	15.0	20.0	16.5	15.5	11.0
16	11.5	5.5	11.0	9.0	14.5	10.0	22.5	16.0	20.0	14.0	17.0	12.5
17	12.0	5.5	9.5	8.5	15.5	11.0	22.0	17.0	18.5	13.0	16.0	10.5
18	12.5	6.5	12.5	7.5	16.0	12.0	22.0	17.0	19.0	12.5	16.0	10.0
19	11.0	7.0	14.0	9.5	15.5	12.5	21.0	17.0	17.5	13.0	16.0	12.0
20	13.0	7.5	14.0	10.0	16.5	11.0	22.5	16.0	18.5	11.5	16.5	11.5
21	12.5	8.0	14.5	10.0	16.5	12.0	23.0	17.0	19.0	12.0	13.5	10.0
22	11.0	9.5	13.5	10.0	17.0	12.0	23.0	17.0	19.0	12.5	13.5	8.0
23	10.5	8.0	13.0	9.5	16.5	12.5	22.0	17.5	18.5	14.5	13.0	7.5
24	10.0	8.0	11.0	8.5	17.5	12.0	22.0	17.0	18.0	15.0	13.5	8.0
25	11.5	6.0	9.0	6.5	18.5	12.5	22.5	16.5	17.5	14.0	13.5	8.0
26	12.0	7.0	10.5	7.0	19.0	13.5	23.0	17.0	19.5	13.0	14.0	8.0
27	12.0	7.5	12.0	8.0	19.0	14.5	23.5	17.0	18.5	13.5	13.5	9.0
28	12.0	7.5	12.0	8.5	19.0	13.0	24.0	17.5	18.0	13.0	13.5	9.0
29	10.5	9.0	10.5	9.0	18.5	13.5	22.0	17.5	16.5	13.0	14.5	9.0
30	9.5	8.0	12.0	7.5	20.5	16.0	---	---	14.5	11.5	14.5	9.0
31	---	---	10.5	8.0	---	---	---	---	14.5	10.5	---	---

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO

LOCATION.--Lat 39°49'34", long 108°10'57", in SE¼SE¼ sec.32, T.2 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 20 ft (6 m) downstream from private bridge, 1,100 ft (340 m) upstream from Stewart Gulch, and 14.3 mi (23.0 km) west of Rio Blanco.

DRAINAGE AREA.--177 mi² (458 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,366 ft (1,940 m), from topographic map.

REMARKS.--Records good. Several diversions above station for irrigation of hay meadows.

AVERAGE DISCHARGE.--6 years, 13.1 ft³/s (0.371 m³/s), 9,490 acre-ft/yr (11.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 520 ft³/s (14.7 m³/s) July 19, 1977, gage height, 7.01 ft (2.137 m), from rating based on indirect measurement; minimum daily, 0.60 ft³/s (0.017 m³/s) Aug. 9, 10, Sept. 9, 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 141 ft³/s (3.99 m³/s) at 1200 May 17, gage height, 4.64 ft (1.414 m), only peak above base of 100 ft³/s (2.8 m³/s); minimum daily, 1.6 ft³/s (0.045 m³/s) Sept. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	15	11	11	9.0	11	12	58	42	10	21	15
2	5.9	15	11	10	8.9	10	12	56	41	12	22	12
3	5.9	14	11	9.9	8.9	11	12	61	35	11	22	13
4	5.9	14	9.6	9.9	8.9	11	12	67	37	9.1	25	13
5	6.2	14	9.6	9.9	8.9	11	13	71	26	8.9	27	13
6	6.2	14	9.6	9.2	8.9	11	13	72	25	8.8	25	13
7	5.9	13	9.9	9.9	9.0	11	13	83	21	8.6	21	14
8	5.9	13	9.9	9.9	9.0	11	13	96	20	10	22	15
9	5.9	13	9.9	9.9	8.9	10	14	98	19	11	22	15
10	6.8	13	9.9	10	8.8	10	14	101	20	11	21	12
11	7.7	13	10	10	8.7	11	14	105	16	11	20	9.6
12	7.1	13	10	9.9	8.6	11	14	131	15	11	20	9.4
13	6.5	13	10	10	8.5	11	14	130	13	9.3	20	10
14	6.8	13	10	12	8.5	11	15	125	12	11	19	9.7
15	7.1	12	10	11	9.1	12	16	128	12	12	18	9.3
16	8.0	12	10	9.9	9.1	12	19	129	12	11	18	10
17	8.3	12	10	9.9	8.8	11	22	135	11	12	18	8.1
18	8.7	12	10	9.6	12	11	29	126	10	13	17	7.4
19	9.4	12	10	9.2	13	11	48	111	9.4	9.9	16	7.6
20	11	12	10	8.9	12	11	63	103	7.9	10	16	9.4
21	11	12	10	9.0	11	12	76	97	8.5	9.9	15	9.2
22	12	12	11	9.0	11	12	77	94	9.8	9.2	16	9.5
23	13	12	11	8.9	11	12	60	93	9.2	9.9	15	6.1
24	14	12	11	8.8	9.9	12	51	89	8.0	11	16	4.0
25	14	12	11	8.7	9.7	12	45	83	8.2	12	16	1.6
26	14	11	10	8.4	9.6	12	42	79	7.5	13	16	4.6
27	14	11	11	8.8	10	11	40	72	7.8	12	16	5.5
28	14	11	11	9.1	11	12	40	65	7.1	13	15	8.1
29	17	11	11	9.1	11	12	38	55	8.6	14	14	5.4
30	16	11	11	9.1	---	12	45	52	8.8	16	15	5.1
31	15	---	11	9.0	---	12	---	47	---	21	16	---
TOTAL	295.4	377	320.4	297.9	281.7	350	896	2812	487.6	351.5	580	284.6
MEAN	9.53	12.6	10.3	9.61	9.71	11.3	29.9	90.7	16.3	11.3	18.7	9.49
MAX	17	15	11	12	13	12	77	135	42	21	27	15
MIN	5.9	11	9.6	8.4	8.5	10	12	47	7.1	8.6	14	1.6
AC-FT	586	748	636	591	559	694	1780	5580	967	697	1150	565

CAL YR 1979 TOTAL 7977.6 MEAN 21.9 MAX 156 MIN 2.9 AC-FT 15820
WTR YR 1980 TOTAL 7332.1 MEAN 20.0 MAX 135 MIN 1.6 AC-FT 14540

BEST DOCUMENT AVAILABLE

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1974 to current year.
pH: December 1974 to current year.
WATER TEMPERATURE: December 1974 to current year.
DISSOLVED OXYGEN: December 1974 to current year.
SUSPENDED SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since April 1974. Water-quality monitor since December 1974.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,690 micromhos June 21, 1976; freezing, 344 micromhos Apr. 13, 1976.
WATER TEMPERATURES: Maximum, 29.5°C July 25, 1977; minimum, freezing point on many days during winter months each year.
DISSOLVED OXYGEN: Maximum, 15.7 mg/L Oct. 8, 1975; minimum, 5.1 mg/L July 17, 1979.
pH: Maximum, 9.0 units June 21, 1976; minimum, 7.0 units May 24, 1976.
SEDIMENT CONCENTRATIONS: Maximum daily, 20,300 mg/L July 20, 1974; minimum daily, 6 mg/L several days during September 1976.
SEDIMENT LOADS: Maximum daily, 4,580 tons (4,150 t) July 20, 1974; minimum daily, 0.04 ton (0.04 t) Apr. 27, 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,310 micromhos July 23; minimum, 706 micromhos May 7.
WATER TEMPERATURES: Maximum, 23.0°C Aug. 19; minimum, freezing point on many days November to February.
DISSOLVED OXYGEN: Maximum, 12.3 mg/L Aug. 17; minimum, 5.0 mg/L June 27, 28, 29.
pH: Maximum, 8.5 units several days in November to February; minimum, 7.7 units several days during May to July.
SEDIMENT CONCENTRATIONS: Maximum daily, 4,070 mg/L Apr. 18; minimum daily, 9 mg/L Oct. 15.
SEDIMENT LOADS: Maximum daily, 1,230 tons (1,116 t) May 15, 16; minimum daily, 0.17 ton (0.15 t) Oct. 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALKA-LINITY FIELD (MG/L AS CACO3)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
24...	1115	16	1120	8.3	5.5	10.2	420	--	--	--	--
NOV											
01...	1030	15	1000	8.3	1.5	11.2	410	--	--	--	--
14...	1550	13	1100	8.4	5.0	9.8	390	--	--	--	--
DEC											
13...	1205	9.6	1160	8.2	.0	10.8	450	24	K2400	K8	K40
JAN											
23...	1115	8.3	1110	8.4	.0	11.0	390	--	--	--	--
FEB											
20...	1410	12	980	8.2	5.0	9.4	370	--	--	--	--
MAR											
19...	1015	11	1000	8.3	6.0	10.4	400	--	--	--	--
25...	1325	12	1000	8.3	5.0	11.1	380	--	--	--	--
APR											
24...	1310	56	775	8.1	9.0	9.6	270	--	--	--	--
MAY											
15...	0945	129	767	7.8	6.0	9.6	270	140	K420	K330	160
JUN											
12...	1400	16	1100	7.9	17.5	7.3	450	--	--	--	--
26...	1030	8.0	1200	7.9	14.5	7.8	450	--	--	--	--
JUL											
16...	1405	16	1120	8.2	20.0	8.7	460	--	--	--	--
AUG											
18...	1030	E17	1060	7.9	12.0	9.7	360	11	96	K3	580
SEP											
15...	1025	17	1020	7.9	10.0	9.4	420	17	170	K20	120
25...	1345	1.5	1170	8.0	7.5	9.6	430	--	--	--	--

E ESTIMATED.

K BASED ON NONIDEAL COLONY COUNT.

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)
OCT											
24...	360	0	68	46	120	2.8	3.2	--	180	16	.9
NOV											
01...	--	--	--	--	--	--	--	--	--	--	--
14...	370	0	73	45	120	2.7	3.1	--	180	15	1.1
DEC											
13...	410	0	80	50	130	2.8	2.6	.1	180	12	1.0
JAN											
23...	360	0	65	48	110	2.5	2.7	--	180	13	1.1
FEB											
20...	330	0	65	40	110	2.6	4.2	--	140	11	.9
MAR											
19...	--	--	--	--	--	--	--	--	--	--	--
25...	320	0	63	40	110	2.7	2.5	--	160	11	.3
APR											
24...	260	0	55	30	81	2.2	3.0	--	130	10	.6
MAY											
15...	260	0	56	29	63	1.7	5.2	.0	120	7.7	.4
JUN											
12...	360	0	70	45	120	2.8	3.4	--	170	11	.7
26...	--	--	--	--	--	--	--	--	--	--	--
JUL											
16...	390	0	71	51	140	3.1	4.2	--	190	14	1.1
AUG											
18...	340	0	68	41	110	2.6	3.0	.0	170	14	.9
SEP											
15...	350	0	68	44	120	2.8	3.1	.0	160	13	.9
25...	--	--	--	--	--	--	--	--	--	--	--

DATE	BROMIDE DISSOLVED (MG/L AS BR)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, DISSOLV (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)
OCT										
24...	--	17	706	.96	26.7	.42	.000	1.1	.67	.67
NOV										
01...	--	--	--	--	--	--	--	--	--	--
14...	--	16	691	.94	24.3	.76	.030	1.5	.72	.75
DEC										
13...	.10	18	750	1.0	19.0	.77	.060	1.2	.36	.42
JAN										
23...	--	17	674	.92	15.1	.62	.050	1.4	.74	.79
FEB										
20...	--	14	610	.83	20.1	.47	.000	.80	.33	.33
MAR										
19...	--	--	--	--	--	--	--	--	--	--
25...	--	13	630	.86	20.4	.36	.040	1.5	1.1	1.1
APR										
24...	--	14	491	.67	71.6	1.1	.000	2.2	1.1	1.1
MAY										
15...	.10	15	466	.63	162	1.5	.020	2.3	.75	.77
JUN										
12...	--	17	711	.97	30.7	.63	.010	1.3	.62	.63
26...	--	--	--	--	--	--	--	--	--	--
JUL										
16...	--	16	764	1.0	33.0	.00	.020	.81	.79	.81
AUG										
18...	.00	16	644	.88	E29.6	.67	.010	1.1	.38	.39
SEP										
15...	.00	16	682	.93	31.3	.58	.020	1.0	.43	.45
25...	--	--	--	--	--	--	--	--	--	--

BEST DOCUMENT AVAILABLE

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)
OCT										
24...	.020	3	210	290	70	--	5.1	.1	1	--
NOV										
01...	--	--	--	--	--	--	--	--	--	--
14...	.020	3	200	20	70	20	--	--	0	--
DEC										
13...	.040	2	190	10	50	--	19	.3	0	--
JAN										
23...	.230	3	210	10	60	--	5.4	.6	1	--
FEB										
20...	[illegible]	3	180	50	60	--	18	1.3	3	--
MAR										
19...	--	--	--	--	--	--	--	--	--	--
25...	.090	3	190	10	60	--	12	--	0	--
APR										
24...	.940	3	130	< 10	8	--	12	5.9	1	--
MAY										
15...	1.20	4	110	< 10	6	--	12	11	0	.00
JUN										
12...	.090	4	200	20	60	--	17	1.3	1	--
26...	--	--	--	--	--	--	--	--	--	--
JUL										
16...	.070	4	280	30	80	--	22	.3	2	--
AUG										
18...	.040	3	210	< 10	40	--	20	.2	0	--
SEP										
15...	.020	3	220	10	40	--	6.9	.4	0	.00
25...	--	--	--	--	--	--	--	--	--	--

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC												
13...	30	100	< 1	0	0	0	10	.0	< 10	1	1600	< 3
MAY												
15...	30	90	< 1	0	3	0	10	.0	< 10	2	800	< 3
AUG												
18...	0	100	< 1	0	2	1	10	.0	16	1	1400	< 3
SEP												
15...	10	100	< 1	0	2	0	10	.0	12	1	1500	< 3

DATE	GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CYANIDE TOTAL (MG/L AS CN)
DEC												
13...	< 10	< 1.0	< 15	< 1.5	< 8.0	< 1.4	< 8.2	< 1.5	.09	--	3.0	.00
MAY												
15...	15	39	23	57	8.2	64	7.7	60	.07	--	2.4	.00
AUG												
18...	< 6.7	< .3	< 9.8	< .4	< 4.9	.5	< 4.8	.4	.07	--	2.4	.00
SEP												
15...	< 4.9	< .3	< 7.2	< .4	< 5.0	< .4	< 4.8	< .4	.10	2.8	--	.01

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
SEP												
15...	1025	0	.0	.0	.0	.1	.0	.0	.1	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4-D, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4,5-T TOTAL IN BOTTOM MATERIAL (UG/KG)	SILVEX, TOTAL IN BOTTOM MATERIAL (UG/KG)
SEP												
15...	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0	0

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM
MAY								
01...	1056	68	1950	358	21	32	57	79
07...	1250	78	2490	524	21	30	57	81
15...	1150	127	2640	905	19	27	46	68

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1110	1080	1050	---	1080	1060	---	769	871	1200	1110	1040
2	1120	1080	---	---	1070	1070	---	759	877	1170	1100	1050
3	1120	1080	---	---	1070	1050	---	---	890	1170	1090	1050
4	1130	1080	1080	1090	1070	1040	---	---	896	1190	1080	1050
5	1140	1070	1080	1090	1080	1060	---	---	984	1190	1070	1050
6	1140	1070	1070	1090	1070	---	---	---	1010	1180	1070	1050
7	1150	1060	1070	1090	1060	---	---	719	1040	1170	1080	1040
8	1180	1070	1070	1080	1080	---	---	---	1080	1150	1090	1050
9	1190	1070	1070	1070	1120	---	---	---	1080	1150	1090	1050
10	1180	1070	1060	---	1060	---	1010	---	1080	1160	1080	---
11	1150	1070	---	---	1090	---	1010	---	1100	1170	1060	---
12	1140	1070	---	---	1080	---	996	---	1090	1170	1060	---
13	1140	1070	---	---	1070	---	---	---	1100	1180	1050	---
14	1140	1060	---	---	---	---	---	---	1110	1180	1050	---
15	1150	---	---	---	---	---	1000	741	1130	1160	1050	---
16	1150	1080	---	---	---	---	---	749	1160	1150	1070	---
17	1160	1080	---	---	---	---	---	751	1190	1130	1060	---
18	1160	1070	---	---	---	---	---	761	1200	1150	1050	---
19	1170	1050	---	---	---	---	---	780	1190	1210	1050	1100
20	1170	1050	---	---	1000	---	---	792	1200	1200	1050	1100
21	1190	1070	---	---	1040	---	---	794	---	1240	1050	1100
22	1170	1080	---	---	1060	---	---	795	---	1260	1050	1110
23	1140	1090	---	1080	1060	---	---	801	---	1230	1050	1120
24	1110	1080	---	1090	1070	---	---	812	---	1190	1040	---
25	1110	1070	---	1080	1080	---	---	822	---	1170	1050	---
26	1100	1060	---	1080	1070	---	---	836	1200	1160	1040	1140
27	1110	1070	---	1080	1040	---	---	850	1200	1160	1040	1140
28	1110	1120	---	1040	1010	---	---	857	1210	1150	1040	1130
29	1090	1110	---	1050	1040	---	---	866	1180	1150	1040	1140
30	1090	1070	---	1070	---	---	---	868	1200	1150	1040	1140
31	1090	---	---	1120	---	---	---	872	---	1120	1040	---

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.5	6.5	6.5	.0	.5	.0	---	---	3.5	.0	11.0	3.0
2	15.5	7.0	7.5	1.5	---	---	---	---	5.5	.5	6.5	.5
3	15.0	6.5	7.5	1.5	---	---	---	---	6.5	2.0	8.0	3.0
4	15.0	5.0	8.0	3.5	5.0	1.0	5.0	2.0	7.0	2.0	9.0	3.0
5	15.0	5.5	8.5	2.5	5.0	2.0	4.0	.5	5.0	.0	9.5	2.5
6	15.5	5.5	8.5	2.0	5.0	.0	3.0	.0	5.5	1.0	---	---
7	16.0	6.0	7.5	5.0	5.5	.5	3.0	.0	6.0	1.0	---	---
8	15.0	6.0	7.5	4.5	6.0	3.0	4.5	.0	3.0	.0	---	---
9	14.0	6.0	7.5	4.0	5.0	1.0	4.5	2.0	.0	.0	---	---
10	14.5	5.5	7.0	2.0	5.0	1.0	---	---	.5	.0	---	---
11	14.5	5.5	6.0	3.0	---	---	---	---	.5	.0	---	---
12	14.0	5.5	6.5	.5	---	---	---	---	3.5	.0	---	---
13	14.0	6.0	6.5	.5	---	---	---	---	---	---	---	---
14	11.0	6.5	---	---	---	---	---	---	---	---	---	---
15	13.5	6.0	---	---	---	---	---	---	---	---	---	---
16	13.5	7.5	6.0	.0	---	---	---	---	---	---	---	---
17	12.0	5.0	6.0	.0	---	---	---	---	---	---	---	---
18	13.0	8.0	7.0	3.5	---	---	---	---	---	---	---	---
19	13.0	8.5	3.5	1.5	---	---	---	---	---	---	---	---
20	10.0	4.5	5.0	1.5	---	---	---	---	6.5	5.0	---	---
21	9.0	5.0	3.5	.5	---	---	---	---	8.0	3.5	---	---
22	10.5	3.0	1.5	.0	---	---	---	---	7.0	3.5	---	---
23	11.5	4.0	3.0	.0	---	---	1.0	.0	6.0	1.5	---	---
24	11.0	4.5	4.5	1.0	---	---	4.5	.0	8.0	.0	---	---
25	12.0	4.5	4.5	2.5	---	---	5.5	1.0	7.5	.0	---	---
26	12.0	6.0	4.0	2.0	---	---	3.0	.0	9.5	.0	---	---
27	11.0	4.5	2.5	.0	---	---	3.5	.0	10.0	.0	---	---
28	9.5	3.5	.0	.0	---	---	1.0	.0	10.0	.0	---	---
29	6.5	4.5	.5	.0	---	---	6.0	.0	7.5	3.5	---	---
30	7.0	3.0	.5	.0	---	---	2.5	.0	---	---	---	---
31	6.5	.5	---	---	---	---	.0	.0	---	---	---	---

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	11.0	8.0	12.5	6.0	21.5	13.0	18.0	11.0	18.0	6.0
2	---	---	12.0	5.5	15.0	5.5	17.5	13.5	20.5	10.0	20.5	7.0
3	---	---	---	---	16.5	6.0	20.0	11.0	18.0	8.5	18.0	7.5
4	---	---	---	---	17.5	6.0	20.0	10.5	19.5	8.0	20.0	7.5
5	---	---	---	---	19.0	6.5	19.5	10.0	19.5	8.0	18.0	7.5
6	---	---	---	---	18.5	7.0	20.0	9.5	21.0	9.0	17.5	9.5
7	---	---	10.5	7.5	19.5	7.0	17.5	11.0	21.5	9.5	16.0	10.5
8	---	---	---	---	18.5	7.0	20.5	12.0	21.5	9.5	14.5	10.0
9	---	---	---	---	19.5	7.5	19.0	11.0	23.0	11.0	13.5	10.0
10	10.5	4.5	---	---	20.5	8.0	20.0	11.5	21.0	9.5	---	---
11	11.0	2.5	---	---	20.0	8.0	20.5	12.5	21.0	8.0	---	---
12	13.0	1.0	---	---	17.5	7.5	19.0	12.0	19.5	8.0	---	---
13	14.5	.5	---	---	18.5	10.5	19.0	12.5	16.5	10.0	---	---
14	16.5	1.0	---	---	18.5	7.0	21.0	11.5	20.0	10.5	---	---
15	13.0	3.0	11.5	6.5	19.0	7.5	21.5	10.0	19.5	11.5	---	---
16	---	---	11.0	6.0	20.0	7.5	21.5	13.0	15.5	9.0	---	---
17	---	---	10.0	5.5	20.0	8.0	20.5	10.5	18.5	8.0	---	---
18	---	---	13.5	4.5	20.0	8.5	20.5	10.5	20.0	8.0	---	---
19	---	---	14.5	5.5	17.5	9.5	20.0	11.5	18.5	8.0	17.0	11.5
20	---	---	15.0	6.5	20.0	8.5	21.5	10.0	19.0	7.5	17.5	8.5
21	---	---	16.5	7.0	---	---	21.0	10.0	19.5	7.0	15.0	6.0
22	---	---	15.5	7.5	---	---	20.0	10.0	19.5	7.0	15.5	5.0
23	---	---	14.5	7.5	---	---	19.0	10.5	18.0	9.5	14.5	4.5
24	---	---	11.5	7.0	---	---	19.5	9.5	17.0	11.0	---	---
25	---	---	10.5	4.0	---	---	19.5	9.5	17.0	10.0	---	---
26	---	---	12.5	4.5	20.5	12.0	20.5	9.0	20.5	8.5	11.5	5.0
27	---	---	14.5	5.0	20.5	10.0	21.5	9.5	19.0	8.0	13.0	6.0
28	---	---	14.5	6.0	20.0	8.5	22.0	9.0	19.5	8.5	15.0	6.0
29	---	---	12.0	7.5	21.5	9.5	19.5	9.5	16.5	8.5	14.5	6.5
30	---	---	15.0	6.0	20.0	12.0	19.0	11.0	16.0	7.5	17.0	7.5
31	---	---	14.0	5.5	---	---	20.5	10.0	14.0	7.0	---	---

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	8.2	8.3	---	8.4	8.2	---	8.2	7.8	8.0	8.1	8.1
2	8.3	8.2	---	---	8.5	8.2	---	8.0	7.8	7.9	8.1	8.1
3	8.2	8.2	---	---	8.4	8.2	---	---	7.7	7.9	8.1	8.1
4	8.3	8.2	8.4	8.2	8.5	8.2	---	---	8.0	7.9	8.1	8.1
5	8.2	8.2	8.4	8.2	8.5	8.2	---	---	8.0	7.9	8.1	8.1
6	8.2	8.2	8.4	8.2	8.5	---	---	---	8.0	7.9	8.1	8.1
7	8.2	8.2	8.4	8.2	8.5	---	---	8.2	7.9	7.9	8.1	8.2
8	8.2	8.2	8.4	8.2	8.5	---	---	---	7.8	7.9	8.1	8.2
9	8.2	8.2	8.4	8.2	8.4	---	---	---	7.8	8.0	8.1	8.2
10	8.2	8.2	8.4	---	8.4	---	8.2	---	7.9	7.9	8.0	---
11	8.2	8.2	---	---	8.4	---	8.2	---	7.8	8.0	8.1	---
12	8.2	8.2	---	---	8.4	---	8.2	---	7.8	8.0	8.0	---
13	8.2	8.2	---	---	8.5	---	8.2	---	7.9	7.9	8.0	---
14	8.2	---	---	---	---	---	8.2	---	7.9	8.0	8.0	---
15	8.2	---	---	---	---	---	8.2	7.7	8.0	8.0	8.0	---
16	8.2	8.4	---	---	---	---	---	7.7	8.0	7.8	8.0	---
17	8.2	8.4	---	---	---	---	---	7.7	8.0	8.0	8.0	---
18	8.2	8.4	---	---	---	---	---	7.7	8.1	8.1	8.0	---
19	8.2	8.4	---	---	---	---	---	7.7	8.1	8.1	8.0	8.3
20	8.2	8.4	---	---	8.1	---	---	7.8	8.1	8.1	8.0	8.3
21	8.2	8.4	---	---	8.1	---	---	7.7	---	8.1	8.0	8.3
22	8.2	8.4	---	---	8.1	---	---	7.8	---	8.1	8.0	8.3
23	8.2	8.4	---	8.4	8.2	---	---	7.8	---	8.0	8.0	8.2
24	8.2	8.4	---	8.5	8.2	---	---	7.8	---	8.1	8.0	---
25	8.2	8.4	---	8.5	8.2	---	---	7.8	---	8.1	8.0	---
26	8.2	8.4	---	8.5	8.2	---	---	7.8	8.0	8.1	8.0	8.3
27	8.2	8.4	---	8.5	8.2	---	---	7.8	8.0	8.1	8.0	8.2
28	8.2	8.4	---	8.5	8.1	---	---	7.8	7.9	8.1	8.1	8.3
29	8.2	8.2	---	8.5	8.2	---	---	7.8	8.0	8.1	8.1	8.3
30	8.2	8.3	---	8.5	---	---	---	7.8	8.0	8.1	8.1	8.3
31	8.2	---	---	8.4	---	---	---	7.8	---	8.1	8.1	---

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.7	7.0	10.9	9.0			---	---	11.1	9.9	10.7	8.7
2	9.8	7.1	10.7	8.9			---	---	10.9	9.8	11.1	9.6
3	9.7	7.2	10.5	8.8			---	---	10.6	9.5	10.4	9.2
4	9.9	7.3	10.2	8.6			10.0	9.2	10.5	9.4	10.4	9.1
5	10.1	7.3	10.4	8.6			10.4	9.4	11.1	9.8	10.7	9.1
6	10.1	7.1	10.4	8.5			10.2	9.6	10.8	9.6	---	---
7	10.0	7.0	10.0	8.5			10.3	9.4	10.6	9.6	---	---
8	10.1	7.0	10.0	8.6			10.5	9.6	11.1	10.4	---	---
9	10.1	7.3	10.3	8.6			10.7	9.8	10.9	10.5	---	---
10	10.1	7.3	10.5	8.7			---	---	10.8	10.5	---	---
11	9.9	7.2	10.5	9.0			---	---	10.8	10.2	---	---
12	10.1	7.2	10.8	9.1			---	---	10.8	9.8	---	---
13	9.8	7.2	10.8	9.0			---	---	10.6	10.3	---	---
14	9.9	7.7	---	---			---	---	---	---	---	---
15	9.7	7.1	---	---			---	---	---	---	---	---
16	9.5	7.2	11.2	9.3			---	---	---	---	---	---
17	10.2	7.7	11.1	9.1			---	---	---	---	---	---
18	9.6	7.5	10.1	9.0			---	---	---	---	---	---
19	9.6	7.4	10.5	9.6			---	---	---	---	---	---
20	9.3	7.8	10.7	9.3			---	---	9.8	9.4	---	---
21	10.1	8.6	11.0	9.7			---	---	10.3	9.3	---	---
22	10.4	8.4	10.8	8.9			---	---	10.4	9.5	---	---
23	10.2	8.1	10.7	9.5			11.4	10.8	10.7	9.8	---	---
24	10.2	8.2	10.5	9.3			11.3	10.0	11.4	9.4	---	---
25	10.1	8.0	10.1	9.3			10.8	9.6	11.4	9.5	---	---
26	9.9	8.0	10.0	9.3			11.1	10.2	11.4	9.1	---	---
27	10.3	8.3	10.7	9.8			11.2	9.9	11.2	8.9	---	---
28	10.5	8.4	10.7	9.5			10.9	10.5	11.1	8.9	---	---
29	10.3	8.8	---	---			10.8	9.5	10.3	9.6	---	---
30	10.3	9.0	---	---			11.1	10.3	---	---	---	---
31	10.8	9.1	---	---			11.0	10.6	---	---	---	---

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	8.7	7.6	9.6	8.5	---	---	10.5	8.8	---	---
2	---	---	---	---	9.6	8.2	---	---	10.6	8.6	---	---
3	---	---	---	---	9.4	7.9	---	---	10.8	9.1	---	---
4	---	---	---	---	9.5	8.7	---	---	11.2	9.0	---	---
5	---	---	---	---	9.9	7.3	---	---	11.1	9.0	---	---
6	---	---	---	---	9.6	7.2	---	---	11.0	9.1	---	---
7	---	---	8.4	8.0	9.2	6.9	---	---	11.1	9.0	---	---
8	---	---	---	---	9.1	6.9	---	---	11.2	9.1	---	---
9	---	---	---	---	8.8	6.6	---	---	11.1	9.6	---	---
10	10.0	8.2	---	---	8.7	6.5	---	---	11.6	9.7	---	---
11	10.4	8.3	---	---	8.5	6.4	---	---	12.2	9.8	---	---
12	10.6	8.1	---	---	8.5	7.1	---	---	12.2	9.9	---	---
13	10.6	7.6	---	---	7.2	6.7	---	---	11.9	10.4	---	---
14	10.3	7.3	---	---	8.7	6.8	---	---	11.8	9.8	---	---
15	10.0	7.7	10.2	9.5	8.8	6.7	---	---	11.6	10.1	---	---
16	---	---	10.2	9.2	8.8	6.6	---	---	12.0	10.4	---	---
17	---	---	9.8	8.9	8.6	6.6	8.4	6.7	12.3	10.3	---	---
18	---	---	9.4	8.0	8.4	6.4	8.9	6.8	12.2	10.1	---	---
19	---	---	8.9	7.4	8.4	6.8	9.2	6.8	11.2	9.5	8.4	7.1
20	---	---	8.9	7.2	8.4	6.5	9.1	7.0	10.5	8.5	9.5	7.3
21	---	---	9.0	7.3	---	---	9.1	7.0	9.5	6.6	9.8	7.7
22	---	---	8.9	7.6	---	---	9.5	6.8	9.7	6.5	10.1	7.7
23	---	---	8.9	7.8	---	---	9.5	6.3	9.1	6.5	---	---
24	---	---	9.0	8.3	---	---	10.1	6.9	8.9	6.6	---	---
25	---	---	9.6	8.6	---	---	10.6	7.0	8.7	6.6	---	---
26	---	---	9.7	8.4	7.2	6.2	10.5	7.1	---	---	---	---
27	---	---	9.6	8.1	7.2	6.0	10.9	7.0	---	---	---	---
28	---	---	9.7	8.3	7.1	6.0	11.8	8.1	---	---	---	---
29	---	---	9.6	7.9	7.0	6.0	10.8	7.7	---	---	---	---
30	---	---	9.9	8.3	---	---	10.9	8.1	---	---	---	---
31	---	---	9.7	8.4	---	---	10.3	8.2	---	---	---	---

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	6.2	---	.80	15	---	4.0	11	87	2.6
2	5.9	---	.60	15	---	4.0	11	99	2.9
3	5.9	---	.40	14	107	4.0	11	100	3.0
4	5.9	14	.20	14	120	4.5	9.6	75	1.9
5	6.2	14	.23	14	78	2.9	9.6	53	1.4
6	6.2	15	.25	14	68	2.6	9.6	33	.86
7	5.9	15	.24	13	---	2.0	9.9	39	1.0
8	5.9	17	.27	13	---	2.0	9.9	125	3.3
9	5.9	14	.22	13	---	2.0	9.9	170	4.5
10	6.8	18	.33	13	---	2.0	9.9	142	3.8
11	7.7	19	.40	13	---	2.0	10	112	3.0
12	7.1	12	.23	13	---	2.0	10	115	3.1
13	6.5	10	.18	13	---	2.0	10	109	2.9
14	6.8	10	.18	13	---	2.0	10	115	3.1
15	7.1	9	.17	12	63	2.0	10	134	3.6
16	8.0	12	.26	12	66	2.1	10	207	5.6
17	8.3	20	.45	12	154	5.0	10	217	5.9
18	8.7	41	.96	12	182	5.9	10	123	3.3
19	9.4	48	1.2	12	90	2.9	10	218	5.9
20	11	150	4.5	12	64	2.1	10	188	5.1
21	11	---	4.0	12	88	2.9	10	146	3.9
22	12	110	3.6	12	86	2.8	11	160	4.8
23	13	200	7.0	12	134	4.3	11	125	3.7
24	14	308	12	12	90	2.9	11	160	4.8
25	14	336	13	12	69	2.2	11	152	4.5
26	14	190	7.2	11	50	1.5	10	115	3.1
27	14	142	5.4	11	311	9.2	11	125	3.7
28	14	158	6.0	11	203	6.0	11	141	4.2
29	17	213	9.8	11	28	.83	11	120	3.6
30	16	99	4.3	11	41	1.2	11	112	3.3
31	15	---	4.0	---	---	---	11	206	6.1
TOTAL	295.4	---	88.37	377	---	91.83	320.4	---	112.46

BEST DOCUMENT AVAILABLE

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	11	125	3.7	9.0	150	3.6	11	---	6.0
2	10	201	5.4	8.9	145	3.5	10	160	4.3
3	9.9	---	5.0	8.9	120	2.9	11	---	4.0
4	9.9	148	4.0	8.9	117	2.8	11	142	4.2
5	9.9	128	3.4	8.9	230	5.5	11	148	4.4
6	9.2	145	3.6	8.9	160	3.8	11	222	6.6
7	9.9	114	3.0	9.0	95	2.3	11	210	6.2
8	9.9	150	4.0	9.0	90	2.2	11	178	5.3
9	9.9	162	4.3	8.9	123	3.0	10	215	5.8
10	10	139	3.8	8.8	115	2.7	10	145	3.9
11	10	175	4.7	8.7	129	3.0	11	115	3.4
12	9.9	175	4.7	8.6	212	4.9	11	105	3.1
13	10	136	3.7	8.5	175	4.0	11	130	3.9
14	12	186	6.0	8.5	130	3.0	11	140	4.2
15	11	223	6.6	9.1	114	2.8	12	173	5.6
16	9.9	198	5.3	9.1	120	2.9	12	130	4.2
17	9.9	150	4.0	8.8	105	2.5	11	157	4.7
18	9.6	142	3.7	12	246	9.0	11	120	3.6
19	9.2	166	4.1	13	251	9.5	11	135	4.0
20	8.9	142	3.4	12	182	5.9	11	160	4.8
21	9.0	130	3.2	11	202	6.0	12	160	5.2
22	9.0	139	3.4	11	184	5.5	12	165	5.3
23	8.9	238	5.7	11	---	7.0	12	130	4.2
24	8.8	198	4.7	9.9	---	8.0	12	140	4.5
25	8.7	130	3.1	9.7	342	9.0	12	174	5.6
26	8.4	162	3.7	9.6	150	3.9	12	150	4.9
27	8.8	157	3.7	10	186	5.0	11	162	4.8
28	9.1	145	3.6	11	335	9.9	12	142	4.6
29	9.1	136	3.3	11	---	8.0	12	132	4.3
30	9.1	120	2.9	---	---	---	12	142	4.6
31	9.0	170	4.1	---	---	---	12	135	4.4
TOTAL	297.9	---	127.8	281.7	---	142.1	350	---	144.6

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	12	92	3.0	58	2380	373	42	---	110
2	12	111	3.6	56	2330	352	41	---	100
3	12	121	3.9	61	2600	428	35	---	75
4	12	136	4.4	67	2800	507	37	900	90
5	13	130	4.6	71	3200	613	26	314	22
6	13	---	5.0	72	3200	622	25	339	23
7	13	---	6.0	83	3800	852	21	338	19
8	13	203	7.1	96	---	600	20	205	11
9	14	202	7.6	98	---	640	19	230	12
10	14	221	8.4	101	---	680	20	242	13
11	14	221	8.4	105	---	730	16	130	5.6
12	14	221	8.4	131	---	1150	15	123	5.0
13	14	221	8.4	130	---	1100	13	90	3.2
14	15	325	13	125	---	1020	12	96	3.1
15	16	488	21	128	3560	1230	12	66	2.1
16	19	1040	53	129	3520	1230	12	58	1.9
17	22	1980	118	135	3220	1170	11	42	1.2
18	29	4070	319	126	3100	1050	10	43	1.2
19	48	---	360	111	2720	815	9.4	60	1.5
20	63	---	540	103	2310	642	7.9	66	1.4
21	74	---	690	97	2040	534	8.5	58	1.3
22	77	---	750	94	2100	533	9.8	54	1.4
23	60	---	500	93	1980	497	9.2	52	1.3
24	51	---	510	89	1750	421	8.0	30	.65
25	45	---	120	83	---	440	8.2	29	.64
26	42	---	110	79	---	400	7.5	42	.85
27	40	---	100	72	---	360	7.8	38	.80
28	40	1240	134	65	---	260	7.1	32	.61
29	38	---	320	55	750	111	8.4	64	1.5
30	45	---	120	52	---	110	8.8	97	2.3
31	---	---	---	47	---	110	---	---	---
TOTAL	894	---	4856.8	2812	---	19580	487.6	---	512.55

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	10	138	3.7	21	170	9.6	15	62	2.5
2	12	152	4.9	22	172	10	12	64	2.1
3	11	140	4.2	22	155	9.2	13	68	2.4
4	9.1	88	2.2	25	152	10	13	---	2.0
5	8.8	66	1.6	27	217	16	13	---	2.0
6	8.8	57	1.4	25	172	12	13	---	2.0
7	8.6	48	1.1	21	155	8.8	14	---	2.0
8	10	60	1.6	22	143	8.5	15	---	2.0
9	11	60	1.8	22	135	8.0	15	---	2.0
10	11	80	2.4	21	97	5.5	12	---	1.0
11	11	62	1.8	20	87	4.7	9.6	49	1.3
12	11	62	1.8	20	80	4.3	9.4	61	1.5
13	9.3	35	.88	20	41	2.2	10	60	1.6
14	11	50	1.5	19	91	4.7	9.7	58	1.5
15	12	62	2.0	18	60	2.9	9.3	55	1.4
16	11	47	1.4	18	68	3.3	10	76	2.1
17	12	47	1.5	18	50	2.4	8.1	53	1.2
18	13	---	2.0	17	53	2.4	7.4	---	2.0
19	9.9	---	2.0	16	45	1.9	7.6	138	2.8
20	10	---	2.0	16	52	2.2	9.4	210	5.3
21	9.9	88	2.4	15	82	3.3	9.2	106	2.6
22	9.2	76	1.9	16	75	3.2	9.5	85	2.2
23	9.9	90	2.4	15	58	2.3	6.1	79	1.3
24	11	75	2.2	16	60	2.6	4.0	82	.89
25	12	82	2.7	16	95	4.1	1.6	60	.26
26	13	85	3.0	16	250	11	4.6	87	1.1
27	12	72	2.3	16	85	3.7	5.5	139	2.1
28	13	70	2.5	15	82	3.3	8.1	110	2.4
29	14	84	3.2	14	70	2.6	5.4	86	1.3
30	16	---	4.0	15	67	2.7	5.1	81	1.1
31	21	190	11	16	66	2.9	---	---	---
TOTAL	351.5	---	79.38	580	---	170.3	284.6	---	55.95
YEAR	7332.1		25962.14						

BEST DOCUMENT AVAILABLE

09306015 MIDDLE FORK STEWART GULCH NEAR RIO BLANCO, CO

LOCATION.--Lat 39°47'20", long 108°10'23", in NE¼SW¼ sec.16, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 0.8 mi (1.3 km) upstream from confluence with East Fork and 12.8 mi (20.6 km) west of Rio Blanco.

DRAINAGE AREA.--24.0 mi² (62.2 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, Mar. 22, 1978, to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,592 ft (2,009.2 m), from topographic map.

REMARKS.--Records excellent. Diversions for irrigation of hay meadows above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3.2 ft³/s (0.091 m³/s) Feb. 9, 1976, gage height, 1.40 ft (0.427 m); no flow most days most years.

EXTREMES FOR CURRENT YEAR.--No flow entire year.

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°49'09", long 108°11'08", in SE¼NE¼ sec.5, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 0.6 mi (1.0 km) upstream from mouth, about 300 ft (91 m) above mouth of West Fork Stewart Gulch, and 14.2 mi (22.8 km) west of Rio Blanco.

DRAINAGE AREA.--44.0 mi² (114 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORDS.--WDR CO-77-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,430 ft (1,960 m) (corrected), from topographic map.

REMARKS.--Records good. Diversion immediately upstream from gage for irrigation of about 20 acres (81,000 m²) of grassland.

AVERAGE DISCHARGE.--6 years, 1.58 ft³/s (0.045 m³/s), 1,140 acre-ft/yr (1.41 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38 ft³/s (1.08 m³/s) July 19, 1977, gage height, 4.05 ft (1.234 m); no flow Aug. 7, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5.6 ft³/s (0.159 m³/s) at 1600 Feb. 18, gage height, 3.02 ft (0.920 m); maximum gage height, 3.12 ft (0.951 m) at 0800 Aug. 23 (due to channel work); minimum daily discharge, 0.96 ft³/s (0.027 m³/s) Aug. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.8	1.7	1.6	1.6	2.0	2.1	1.9	1.8	1.8	1.6	1.8
2	1.4	1.7	1.7	1.6	1.6	2.0	2.3	1.9	1.8	1.9	1.6	1.8
3	1.5	1.7	1.6	1.5	1.5	2.1	2.3	1.9	1.8	1.8	1.6	1.8
4	1.6	1.7	1.6	1.5	1.6	2.1	2.3	1.8	1.8	1.7	1.5	2.0
5	1.8	1.8	1.4	1.5	1.6	2.1	2.3	1.8	1.8	1.6	1.5	2.0
6	1.8	1.9	1.4	1.5	1.7	2.1	2.3	1.8	1.7	1.6	1.5	2.1
7	1.7	2.0	1.4	1.6	1.7	2.1	2.3	1.8	1.7	1.6	1.6	2.0
8	1.7	2.0	1.5	1.7	1.9	2.1	2.6	1.8	1.7	1.6	1.6	2.1
9	2.5	2.0	1.5	1.7	1.9	2.1	2.6	1.7	1.8	1.6	1.6	2.2
10	2.5	2.0	1.6	1.7	2.1	2.3	2.5	1.7	1.8	1.6	1.6	2.3
11	2.5	2.2	1.7	1.8	2.1	2.4	2.3	1.8	2.0	1.6	1.6	2.2
12	2.5	2.0	1.6	1.8	2.2	2.4	2.1	1.8	2.0	1.6	1.6	2.2
13	2.0	2.0	1.6	2.0	2.1	2.4	2.0	1.8	2.0	1.6	1.6	2.1
14	1.6	1.8	1.7	1.5	2.1	2.4	2.1	1.8	1.8	1.6	1.6	2.0
15	1.5	1.8	1.8	1.5	2.3	2.6	2.1	1.8	1.8	1.6	1.6	1.8
16	1.5	1.8	1.8	1.5	2.2	2.6	2.1	1.8	1.8	1.6	1.6	1.7
17	1.6	1.9	1.8	1.4	2.2	2.6	2.2	1.9	1.8	1.6	1.6	1.7
18	1.5	2.0	2.0	1.5	2.5	2.6	2.0	1.9	1.7	1.5	1.6	2.3
19	1.6	2.1	1.8	1.4	2.2	2.6	2.0	1.9	1.7	1.6	1.5	2.3
20	1.7	2.1	1.6	1.5	2.1	2.3	2.0	1.9	1.7	1.6	1.5	2.3
21	1.7	1.9	1.6	1.6	2.3	2.3	2.0	1.9	1.6	1.6	1.3	2.3
22	1.7	2.0	1.6	1.6	2.4	2.3	2.0	1.9	1.6	1.5	.96	2.3
23	1.7	2.0	1.6	1.3	2.4	2.3	2.0	1.9	1.6	1.6	1.2	2.4
24	1.5	2.2	1.6	1.4	2.4	2.3	2.0	1.9	1.6	1.6	1.7	2.5
25	1.4	2.2	1.6	1.5	2.6	2.4	1.9	1.9	1.6	1.6	1.8	2.4
26	1.4	2.1	1.6	1.6	2.6	2.4	1.9	1.9	1.6	1.6	1.8	2.4
27	1.4	2.3	1.6	1.8	2.1	2.3	1.8	1.9	1.6	1.6	1.7	2.4
28	1.3	2.2	1.6	1.9	2.3	2.4	1.8	1.9	1.6	1.6	1.8	2.4
29	1.3	2.0	1.6	1.9	2.4	2.4	1.9	1.9	1.6	1.6	1.7	2.5
30	1.3	1.7	1.6	1.8	---	2.4	2.0	1.8	1.6	1.6	1.7	2.4
31	1.6	---	1.6	1.6	---	2.3	---	1.8	---	1.6	1.8	---
TOTAL	52.0	58.9	50.4	49.8	60.7	71.7	63.8	57.2	52.0	50.2	48.96	64.7
MEAN	1.68	1.96	1.63	1.61	2.09	2.31	2.13	1.85	1.73	1.62	1.58	2.16
MAX	2.5	2.3	2.0	2.0	2.6	2.6	2.6	1.9	2.0	1.9	1.8	2.5
MIN	1.2	1.7	1.4	1.3	1.5	2.0	1.8	1.7	1.6	1.5	.96	1.7
AC-FT	103	117	100	99	120	142	127	113	103	100	97	128

CAL YR 1979 TOTAL 510.50 MEAN 1.40 MAX 2.5 MIN .20 AC-FT 1010
WTR YR 1980 TOTAL 680.36 MEAN 1.86 MAX 2.6 MIN .96 AC-FT 1350

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to current year.
WATER TEMPERATURE: October 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1974. Pumping sediment sampler since October 1974.

REMARKS.--Dissolved-oxygen and pH records for the 1979 water year are published in this report.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,200 micromhos Nov. 10, 1975; minimum, 635 micromhos Sept. 3, 1977.
WATER TEMPERATURES: Maximum, 20.5°C July 3, 1976, June 3, 1977; minimum, 0.5°C Jan. 9, Dec. 17, 1977, Mar. 3, Dec. 2, 3, 1978, Jan. 29, 1979.
DISSOLVED OXYGEN: Maximum, 16.6 mg/L Jan. 13, 1976; minimum, 3.6 mg/L Aug. 19, 20, 1977.
pH: Maximum, 8.9 units Dec. 9, 11, 1979; minimum, 7.6 units Oct. 7, 1975.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,350 mg/L June 8, 1975; minimum daily, no flow Aug. 7-9, 1975.
SEDIMENT LOADS: Maximum daily, 10 tons (9.1 t) estimated June 8, 1975; minimum daily, no flow Aug. 7-9, 1975.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,430 micromhos July 1; minimum, 844 micromhos Feb. 18.
WATER TEMPERATURES: Maximum, 18.5°C June 9; minimum, 1.0°C Nov. 22, 27-30, Dec. 12.
DISSOLVED OXYGEN: Maximum, 14.6 mg/L Nov. 21; minimum, 6.4 mg/L June 9.
pH: Maximum, 8.9 units Dec. 9, 11; minimum, 7.7 units June 1-3.
SEDIMENT CONCENTRATIONS: Maximum daily, 237 mg/L Aug. 23; minimum daily, 4 mg/L Feb. 7.
SEDIMENT LOADS: Maximum daily, 1.3 tons (1.2 t) Oct. 11; minimum daily, 0.02 ton (0.02 t) Feb. 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	ALKALINITY FIELD (MG/L AS CACO3)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
24...	1000	2.2	1300	8.4	6.0	10.8	410	--	--	--	--
NOV											
14...	1415	1.9	1300	8.5	10.0	12.8	390	--	--	--	--
DEC											
13...	0940	1.6	1360	8.4	2.0	10.6	420	14	K3600	K12	K36
JAN											
23...	1000	1.2	1350	8.4	4.5	10.9	400	--	--	--	--
FEB											
20...	1300	2.2	1300	8.4	8.0	11.2	400	--	--	--	--
MAR											
25...	1235	2.4	1280	8.2	9.0	11.4	390	--	--	--	--
APR											
24...	1200	2.1	1330	8.4	10.5	10.2	390	--	--	--	--
JUN											
12...	1315	2.0	1330	8.0	16.0	8.3	450	11	--	--	--
JUL											
16...	1320	1.6	1300	8.1	15.0	8.4	410	--	K81	52	280
AUG											
18...	1150	1.6	1320	8.0	12.0	10.4	380	5	K30	K16	230
SEP											
15...	1150	1.8	1350	7.9	11.0	8.3	410	--	--	--	--

K BASED ON NON-IDEAL COLONY COUNT.

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT										
24...	490	79	82	69	120	2.4	1.5	--	350	6.7
NOV										
14...	490	97	83	68	120	2.4	1.6	--	340	6.3
DEC										
13...	560	140	94	77	130	2.4	1.3	.2	370	6.0
JAN										
23...	530	130	89	74	130	2.5	1.3	--	350	6.1
FEB										
20...	520	120	88	72	120	2.3	1.7	--	340	6.1
MAR										
25...	480	93	83	67	120	2.4	1.3	--	340	7.2
APR										
24...	510	120	86	72	130	2.5	1.4	--	340	6.1
JUN										
12...	550	99	95	75	130	2.4	1.3	.1	350	5.6
JUL										
16...	520	110	88	74	130	2.5	1.1	--	350	5.2
AUG										
18...	490	110	84	67	120	2.4	1.2	.0	360	6.2
SEP										
15...	500	88	84	70	120	2.3	1.7	--	340	6.1

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
OCT										
24...	.3	--	15	894	1.2	5.3	.73	.000	1.4	.64
NOV										
14...	.2	--	15	873	1.1	4.4	.94	.020	1.4	.44
DEC										
13...	.3	.10	17	956	1.3	4.1	.99	.010	1.4	.42
JAN										
23...	.3	--	16	911	1.2	2.9	.90	.010	1.6	.65
FEB										
20...	.3	--	15	888	1.2	5.2	.98	.000	1.8	.83
MAR										
25...	.0	--	14	870	1.1	5.6	.77	.000	1.8	1.0
APR										
24...	.3	--	15	888	1.2	5.0	.69	.000	1.4	.66
JUN										
12...	.2	.10	15	948	1.2	5.1	.56	.010	1.1	.48
JUL										
16...	.4	--	16	914	1.2	3.9	.52	.010	.98	.45
AUG										
18...	.3	.00	15	884	1.2	3.8	.72	.000	1.0	.30
SEP										
15...	.3	--	16	880	1.2	4.3	.82	.010	1.2	.38

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT 24...	.64	.017	2	100	10	4	--	3.7	.1	0
NOV 14...	.46	.000	2	80	10	1	2.2	--	--	0
DEC 13...	.43	.010	1	80	< 10	< 1	--	11	.7	0
JAN 23...	.56	.040	2	80	< 10	2	--	4.6	.1	4
FEB 20...	.83	.030	2	80	40	5	--	7.5	.3	3
MAR 25...	1.0	.010	2	80	< 10	4	--	8.8	--	0
APR 24...	.66	.030	1	110	< 10	3	--	16	.7	1
JUN 12...	.49	.080	2	80	< 10	5	--	16	1.0	1
JUL 16...	.46	.030	1	110	< 10	< 3	--	17	.6	1
AUG 18...	.30	.010	2	110	< 10	2	--	15	--	0
SEP 15...	.39	.010	2	110	< 10	2	--	15	.3	14

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC 13...	10	50	< 1	0	0	0	6	.0	< 10	1	3000	< 3
JUN 12...	50	60	< 1	0	0	0	< 4	.0	21	1	2700	4
AUG 18...	0	50	< 1	0	2	2	7	.0	< 10	1	2800	3

DATE	GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CYANIDE TOTAL (MG/L AS CN)
DEC 13...	< 8.8	< .3	< 13	< .4	< 7.3	< .4	< 7.0	< .4	.10	3.2	.00
JUN 12...	< 7.5	1.0	< 11	1.5	< 9.8	1.3	< 9.6	1.3	.09	2.6	.00
AUG 18...	< 9.5	< .3	< 14	< .4	< 6.3	< .4	< 6.1	< .4	.09	2.8	.00

BEST DOCUMENT AVAILABLE

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	1.2	39	.13	1.8	56	.27	1.7	30	.14
2	1.4	62	.23	1.7	111	.51	1.7	85	.39
3	1.5	72	.29	1.7	82	.38	1.6	20	.09
4	1.6	70	.30	1.7	56	.26	1.6	50	.22
5	1.8	35	.17	1.8	62	.30	1.4	60	.23
6	1.8	---	.20	1.9	61	.31	1.4	220	.83
7	1.7	36	.17	2.0	63	.34	1.4	154	.58
8	1.7	52	.24	2.0	39	.21	1.5	70	.28
9	2.5	47	.32	2.0	50	.27	1.5	85	.34
10	2.5	64	.43	2.0	35	.19	1.6	20	.09
11	2.5	189	1.3	2.2	17	.10	1.7	30	.14
12	2.5	---	1.0	2.0	42	.23	1.6	60	.26
13	2.0	---	.50	2.0	22	.12	1.6	50	.22
14	1.6	54	.23	1.8	12	.06	1.7	50	.23
15	1.5	---	.20	1.8	75	.36	1.8	150	.73
16	1.5	50	.20	1.8	37	.18	1.8	60	.29
17	1.6	39	.17	1.9	99	.51	1.8	85	.41
18	1.5	97	.39	2.0	8	.04	2.0	45	.24
19	1.6	122	.53	2.1	15	.09	1.8	18	.08
20	1.7	44	.20	2.1	9	.05	1.6	20	.08
21	1.7	70	.32	1.9	39	.20	1.6	---	.10
22	1.7	59	.27	2.0	6	.03	1.6	---	.10
23	1.7	68	.31	2.0	8	.04	1.6	---	.10
24	1.5	78	.32	2.2	20	.12	1.6	---	.10
25	1.4	225	.85	2.2	9	.05	1.6	---	.10
26	1.4	150	.57	2.1	7	.04	1.6	---	.10
27	1.4	85	.32	2.3	9	.06	1.6	---	.10
28	1.3	57	.20	2.2	15	.09	1.6	---	.10
29	1.3	35	.12	2.0	64	.35	1.6	---	.10
30	1.3	38	.13	1.7	10	.05	1.6	---	.10
31	1.6	14	.06	---	---	---	1.6	---	.10
TOTAL	52.0	---	10.67	58.9	---	5.81	50.4	---	6.97

BEST DOCUMENT AVAILABLE

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	1.6	---	.10	1.6	20	.09	2.0	25	.14
2	1.6	---	.10	1.6	20	.09	2.0	30	.16
3	1.5	---	.10	1.5	20	.08	2.1	25	.14
4	1.5	---	.10	1.6	30	.13	2.1	25	.14
5	1.5	---	.10	1.6	32	.14	2.1	20	.11
6	1.5	---	.20	1.7	20	.09	2.1	45	.26
7	1.6	---	.30	1.7	4	.02	2.1	35	.20
8	1.7	100	.46	1.9	15	.08	2.1	30	.17
9	1.7	110	.50	1.9	13	.07	2.1	23	.13
10	1.7	130	.60	2.1	10	.06	2.3	55	.34
11	1.8	---	.70	2.1	10	.06	2.4	30	.19
12	1.8	---	.70	2.2	45	.27	2.4	15	.10
13	2.0	---	.90	2.1	85	.48	2.4	23	.15
14	1.5	145	.59	2.1	60	.34	2.4	30	.19
15	1.5	75	.30	2.3	110	.68	2.6	32	.22
16	1.5	50	.20	2.2	48	.29	2.6	16	.11
17	1.4	105	.40	2.2	35	.21	2.6	16	.11
18	1.5	90	.36	2.5	55	.37	2.6	19	.13
19	1.4	130	.49	2.2	50	.30	2.6	25	.18
20	1.5	170	.69	2.1	20	.11	2.3	24	.15
21	1.6	175	.76	2.3	25	.16	2.3	34	.21
22	1.6	195	.84	2.4	45	.29	2.3	22	.14
23	1.3	80	.28	2.4	---	.30	2.3	18	.11
24	1.4	40	.15	2.4	---	.30	2.3	22	.14
25	1.5	90	.36	2.6	---	.10	2.4	28	.18
26	1.6	---	.30	2.6	50	.35	2.4	19	.12
27	1.8	---	.30	2.1	60	.34	2.3	28	.17
28	1.9	---	.30	2.3	45	.28	2.4	---	.20
29	1.9	---	.30	2.4	40	.26	2.4	---	.20
30	1.8	---	.10	---	---	---	2.4	---	.20
31	1.6	15	.06	---	---	---	2.3	---	.20
TOTAL	49.8	---	11.64	60.7	---	6.34	71.7	---	5.19

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	APRIL			MAY			JUNE		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	2.1	---	.30	1.9	26	.13	1.8	24	.12
2	2.3	---	.30	1.9	26	.13	1.8	16	.08
3	2.3	38	.24	1.9	28	.14	1.8	12	.06
4	2.3	36	.22	1.8	26	.13	1.8	20	.10
5	2.3	---	.40	1.8	27	.13	1.8	26	.13
6	2.3	---	.20	1.8	28	.14	1.7	22	.10
7	2.3	---	.10	1.8	60	.29	1.7	32	.15
8	2.6	12	.08	1.8	42	.20	1.7	80	.37
9	2.6	16	.11	1.7	38	.17	1.8	56	.27
10	2.5	16	.11	1.7	32	.15	1.8	140	.68
11	2.3	12	.07	1.8	32	.16	2.0	133	.72
12	2.1	18	.10	1.8	66	.32	2.0	70	.38
13	2.0	---	.10	1.8	26	.13	2.0	84	.45
14	2.1	---	.10	1.8	14	.07	1.8	75	.36
15	2.1	16	.09	1.8	20	.10	1.8	65	.32
16	2.1	38	.22	1.8	24	.12	1.8	55	.27
17	2.2	22	.13	1.9	19	.10	1.8	50	.24
18	2.0	22	.12	1.9	20	.10	1.7	55	.25
19	2.0	18	.10	1.9	32	.16	1.7	45	.21
20	2.0	18	.10	1.9	48	.25	1.7	56	.26
21	2.0	20	.11	1.9	54	.28	1.6	44	.19
22	2.0	24	.13	1.9	26	.13	1.6	42	.18
23	2.0	18	.10	1.9	28	.14	1.6	30	.13
24	2.0	26	.14	1.9	18	.09	1.6	38	.16
25	1.9	30	.15	1.9	12	.06	1.6	54	.23
26	1.9	26	.13	1.9	20	.10	1.6	54	.23
27	1.8	22	.11	1.9	46	.24	1.6	38	.16
28	1.8	30	.15	1.9	28	.14	1.6	41	.18
29	1.9	30	.15	1.9	18	.09	1.6	42	.18
30	2.0	36	.19	1.8	12	.06	1.6	42	.18
31	---	---	---	1.8	10	.05	---	---	---
TOTAL	63.8	---	4.55	57.2	---	4.50	52.0	---	7.34

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	1.8	50	.24	1.6	30	.13	1.8	31	.15
2	1.9	64	.33	1.6	24	.10	1.8	21	.10
3	1.8	120	.58	1.6	22	.10	1.8	17	.08
4	1.7	167	.77	1.5	21	.09	2.0	18	.10
5	1.6	116	.50	1.5	30	.12	2.0	12	.06
6	1.6	96	.41	1.5	29	.12	2.1	18	.10
7	1.6	100	.43	1.6	34	.15	2.0	18	.10
8	1.6	74	.32	1.6	18	.08	2.1	22	.12
9	1.6	70	.30	1.6	16	.07	2.2	18	.11
10	1.6	46	.20	1.6	16	.07	2.3	8	.05
11	1.6	22	.10	1.6	16	.07	2.2	20	.12
12	1.6	14	.06	1.6	12	.05	2.2	21	.12
13	1.6	12	.05	1.6	18	.08	2.1	24	.14
14	1.6	16	.07	1.6	20	.09	2.0	9	.05
15	1.6	20	.09	1.6	26	.11	1.8	13	.06
16	1.6	26	.11	1.6	24	.10	1.7	24	.11
17	1.6	38	.16	1.6	22	.10	1.7	44	.20
18	1.5	14	.06	1.6	26	.11	2.3	42	.26
19	1.6	32	.14	1.5	25	.10	2.3	48	.30
20	1.6	34	.15	1.5	50	.20	2.3	40	.25
21	1.6	36	.16	1.3	165	.49	2.3	44	.27
22	1.5	34	.14	.96	129	.39	2.3	34	.21
23	1.6	20	.09	1.2	237	.97	2.4	34	.22
24	1.6	28	.12	1.7	46	.20	2.5	24	.16
25	1.6	26	.11	1.8	31	.15	2.4	23	.15
26	1.6	12	.05	1.8	26	.13	2.4	22	.14
27	1.6	20	.09	1.7	28	.13	2.4	20	.13
28	1.6	19	.08	1.8	46	.22	2.4	13	.08
29	1.6	13	.06	1.7	48	.22	2.5	16	.11
30	1.6	16	.07	1.7	32	.15	2.4	13	.08
31	1.6	24	.10	1.8	37	.18	---	---	---
TOTAL	50.2	---	6.14	48.96	---	5.27	64.7	---	4.13
YEAR	680.36		78.55						

BEST DOCUMENT AVAILABLE

09306025 WEST FORK STEWART GULCH NEAR RIO BLANCO, CO

LOCATION.--Lat 39°47'01", long 108°11'21", in SW¼SE¼ sec.17, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 2.1 mi (3.4 km) upstream from mouth, and 13.5 mi (21.7 km) west of Rio Blanco.

DRAINAGE AREA.--14.2 mi² (36.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, March 1978 to current year.

REVISED RECORDS.--WDR CO 75-2: 1974(M).

GAGE.--Water-stage recorder. Concrete control since Aug. 26, 1974. Altitude of gage is 6,668 ft (2,032 m), from topographic map. Prior to Aug. 26, 1974, at datum 1.50 ft (0.457 m) lower.

REMARKS.--Records excellent except for periods of flow, which are fair. Diversions above gage for irrigation of small hay meadows.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1.5 ft³/s (0.042 m³/s) Feb. 19, 1980, gage height, 1.29 ft (0.393 m); maximum gage height, 1.54 ft (0.469 m) Feb. 10, 1976 (backwater from ice); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.5 ft³/s (0.042 m³/s) at 1200 Feb. 19, gage height, 1.29 ft (0.393 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.08	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.07	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.15	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.21	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.54	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.46	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.14	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.15	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.18	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.06	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	1.99	.15	.00	.00	.00	.00	.00	.00
MEAN	.000	.000	.000	.000	.069	.005	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.54	.08	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	3.9	.3	.00	.00	.00	.00	.00	.00

CAL YR 1979 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00
WTR YR 1980 TOTAL 2.14 MEAN .006 MAX .54 MIN .00 AC-FT 4.2

09306025 WEST FORK STEWART GULCH NEAR RIO BLANCO, CO

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1974 to September 1976, March 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1974 to September 1976, March 1978 to current year.
WATER TEMPERATURE: May 1974 to Septembet 1976, Marcn 1978 to current year.
SUSPENDED-SEDIMENT DISCHARGE: May 1974 to September 1976.

INSTRUMENTATION.--Water-quality monitor and pumping sediment sampler May 1974 to September 1976. Water-quality monitor since March 1978.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,840 micromhos Sept. 24, 25, 1976; minimum, 100 micromhos Feb. 18, 1980.
WATER TEMPERATURES: Minimum, freezing point on many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 500 mg/L Feb. 11, 1976; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 0.27 ton (0.24 t) estimated Feb. 10, 1976; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Not determined.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	NITROGEN, DISSOLV (MG/L AS N)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
FEB 18...	1335	.72	111	8.6	.0	10.6	1.9	290	50	0	16	2.4

DATE	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM AD-SORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	BROMIDE DISSOLVED (MG/L AS BR)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
FEB 18...	2.9	.2	9.6	70	3.1	3.1	.1	.10	3.0	85	.12	.17

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
FEB 18...	.28	.330	1.3	1.6	2.50	1	200	480	40	30	18	10

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)
FEB 18...	110	200	1	0	2	0	0	.0	1	0	130	30

DATE	GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)	CYANIDE TOTAL (MG/L AS CN)
FEB 18...	< 1.8	58	< 2.6	85	11	45	11	46	.05	.05	.01

09306025 WEST FORK STEWART GULCH NEAR RIO BLANCO, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---							
2					---							
3					---							
4					---							
5					---							
6					---							
7					---							
8					---							
9					---							
10					---							
11					---							
12					---							
13					---							
14					---							
15					---							
16					---							
17					---							
18					100							
19					---							
20					---							
21					---							
22					---							
23					---							
24					---							
25					---							
26					---							
27					---							
28					---							
29					---							
30					---							
31					---							

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1									---	---	---	---
2									---	---	---	---
3									---	---	---	---
4									---	---	---	---
5									---	---	---	---
6									---	---	---	---
7									---	---	---	---
8									---	---	---	---
9									---	---	---	---
10									---	---	---	---
11									---	---	---	---
12									---	---	---	---
13									---	---	---	---
14									---	---	3.5	.5
15									---	---	7.5	3.5
16									---	---	---	---
17									---	---	---	---
18									.5	.0	---	---
19									.5	.0	---	---
20									.5	.0	---	---
21									.0	.0	---	---
22									---	---	---	---
23									---	---	---	---
24									---	---	---	---
25									---	---	---	---
26									---	---	---	---
27									.5	.0	---	---
28									.5	.0	---	---
29									.5	.0	---	---
30									---	---	---	---
31									---	---	---	---

09306028 WEST FORK STEWART GULCH AT MOUTH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°48'45", long 108°11'00", in SE¼SE¼ sec.5, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 300 ft (91 m) upstream from mouth and 13.8 mi (22.2 km) west of Rio Blanco.

DRAINAGE AREA.--15.7 mi^2 (40.7 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,443 ft (1,964 m), from topographic map.

REMARKS.--Records for periods of flow are fair. Diversion above station for irrigation of small hay meadows.

AVERAGE DISCHARGE.--6 years, 0.006 ft^3/s (0.001 m^3/s), 4.4 acre-ft/yr (5,430 m^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38 ft^3/s (1.08 m^3/s) Sept. 3, 1977, gage height, 1.66 ft (0.506 m); no flow most days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.8 ft^3/s (0.079 m^3/s) at 1530 Feb. 19, gage height, 1.34 ft (0.408 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.20	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.20	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.20	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.70	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.55	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.50	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.20	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.40	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.70	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.40	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	3.50	.73	.00	.00	.00	.00	.00	.00
MEAN	.000	.000	.000	.000	.12	.024	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.70	.20	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	6.9	1.4	.00	.00	.00	.00	.00	.00

CAL YR 1979 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00
WTR YR 1980 TOTAL 4.23 MEAN .012 MAX .70 MIN .00 AC-FT 8.4

09306028 WEST FORK STEWART GULCH AT MOUTH, NEAR RIO BLANCO, CO

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Automatic pumping sediment sampler since April 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Not determined.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,800 mg/L Sept. 3, 1977; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 4.2 tons (3.8 t) Mar. 5, 1975; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Not determined.
SEDIMENT CONCENTRATIONS: Not determined.
SEDIMENT LOADS: Not determined.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	NITROGEN, DISSOLV (MG/L AS N)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
FEB												
18...	1515	6.6	140	8.7	.0	10.5	1.3	200	51	0	17	2.0

DATE	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM AD-SORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	BROMIDE DISSOLVED (MG/L AS BR)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)
FEB												
18...	3.7	.2	7.0	52	7.6	2.8	.1	.00	8.1	82	.11	1.4

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
FEB												
18...	.32	.120	.85	.97	1.20	2	160	60	10	21	15	8

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)
FEB												
18...	170	200	0	10	3	0	0	.1	1	0	200	10

DATE	GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)	CYANIDE TOTAL (MG/L AS CN)
FEB											
18...	< 1.7	< 29	< 2.5	< 42	9.6	52	9.7	53	.10	.18	.00

09306028 WEST FORK STEWART GULCH AT MOUTH, NEAR RIO BLANCO, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---	106						
2					---	---						
3					---	88						
4					---	97						
5					---	80						
6					---	---						
7					---	---						
8					---	---						
9					---	---						
10					---	---						
11					---	---						
12					---	---						
13					---	---						
14					---	92						
15					---	89						
16					---	---						
17					---	---						
18					104	---						
19					116	---						
20					116	---						
21					128	---						
22					111	---						
23					---	---						
24					---	---						
25					---	---						
26					---	---						
27					100	---						
28					111	---						
29					109	---						
30					---	---						
31					---	---						

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1									---	---	1.0	.0
2									---	---	---	---
3									---	---	1.5	.0
4									---	---	2.0	.0
5									---	---	2.5	.0
6									---	---	---	---
7									---	---	---	---
8									---	---	---	---
9									---	---	---	---
10									---	---	---	---
11									---	---	---	---
12									---	---	---	---
13									---	---	---	---
14									---	---	8.5	.0
15									---	---	12.5	3.0
16									---	---	---	---
17									---	---	---	---
18									.0	.0	---	---
19									1.5	1.0	---	---
20									1.0	1.0	---	---
21									1.0	1.0	---	---
22									1.5	.5	---	---
23									---	---	---	---
24									---	---	---	---
25									---	---	---	---
26									---	---	---	---
27									.5	.0	---	---
28									.0	.0	---	---
29									.0	.0	---	---
30									---	---	---	---
31									---	---	---	---

09306028 WEST FORK STEWART GULCH AT MOUTH, NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.00			.00	---	---	.20		.10
2	.00			.00	---	---	.00		---
3	.00			.00	---	---	.05		.03
4	.00			.00	---	---	.05		.03
5	.00			.00	---	---	.03		.02
6	.00			.00	---	---	.00		---
7	.00			.00	---	---	.00		---
8	.00			.00	---	---	.00		---
9	.00			.00	---	---	.00		---
10	.00			.00	---	---	.00		---
11	.00			.00	---	---	.00		---
12	.00			.00	---	---	.00		---
13	.00			.00	---	---	.00		---
14	.00			.00	---	---	.20		.10
15	.00			.00	---	---	.20		.10
16	.00			.00	---	---	.00		---
17	.00			.00	---	---	.00		---
18	.00			.70	128	.65	.00		---
19	.00			.55	180	.27	.00		---
20	.00			.50	---	.30	.00		---
21	.00			.20	---	.10	.00		---
22	.00			.05	---	.03	.00		---
23	.00			.00	---	---	.00		---
24	.00			.00	---	---	.00		---
25	.00			.00	---	---	.00		---
26	.00			.00	---	---	.00		---
27	.00			.40	---	.30	.00		---
28	.00			.70	---	.50	.00		---
29	.00			.40	---	.30	.00		---
30	.00			---	---	---	.00		---
31	.00			---	---	---	.00		---
TOTAL	0.00			3.50	---	2.45	0.73		0.38
YEAR	4.23		2.83						

BEST DOCUMENT AVAILABLE

09306033 SORGHUM GULCH NEAR RIO BLANCO, CO

LOCATION.--Lat 39°47'07", long 108°12'33", in SE¼SW¼ sec.18, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 3.3 mi (5.3 km) upstream from mouth and 14.6 mi (23.5 km) west of Rio Blanco.

DRAINAGE AREA.--1.22 mi² (3.16 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, March 21, 1978, to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,843 ft (2,085.7 m), from topographic map.

REMARKS.--Records excellent except for periods of flows which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7.0 ft³/s (0.20 m³/s) July 9, 1975, gage height 1.71 ft (0.251 m); no flow most days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.6 ft³/s (0.045 m³/s) at 1900 July 1, gage height 1.29 ft (0.393 m); no flow most days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.01	.01	.58	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.01	.01	.22	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.01	.00	.13	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.02	.01	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.01	.01	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.01	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	.07	.28	.02	.93	.00	.00
MEAN	.000	.000	.000	.000	.000	.000	.002	.009	.001	.030	.000	.000
MAX	.00	.00	.00	.00	.00	.00	.02	.01	.01	.58	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.1	.6	.04	1.8	.00	.00

CAL YR 1979 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00
WTR YR 1980 TOTAL 1.30 MEAN .004 MAX .58 MIN .00 AC-FT 2.6

09306033 SORGHUM GULCH NEAR RIO BLANCO, CO

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, March 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to September 1976, March 1978 to current year.
WATER TEMPERATURE: April 1974 to September 1976, March 1978 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to September 1976.

INSTRUMENTATION.--Water-quality monitor and pumping sediment sampler April 1974 to September 1976. Water-quality monitor since March 1978.

REMARKS.--Flow occurred only on days indicated.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 960 micromhos May 1, 1980; minimum, 160 micromhos July 31, 1976.
WATER TEMPERATURES: Maximum, 18.0°C July 31, 1976; minimum, 0.0°C Feb. 12, 1976.
SEDIMENT CONCENTRATIONS: Maximum daily, 2,000 mg/L July 19, 1975; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 1.4 tons (1.3 t) July 18, 1976; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 960 micromhos May 1; minimum, 611 micromhos May 16.
WATER TEMPERATURES: Not determined.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
APR												
22...	1245	.03	910	8.4	13.0	8.4	17	300	14	65	34	100

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
APR												
22...	2.5	2.6	290	.0	180	21	.2	.20	18	597	.81	.05

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
APR												
22...	.17	.000	.47	.47	.110	3	80	<10	8	10	.6	0

BEST DOCUMENT AVAILABLE

09306033 SORGHUM GULCH NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)
APR 22...	20	200	<1	0	3	0	20	.0	<10	4	1000	<3

DATE	GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)	CYANIDE TOTAL (MG/L AS CN)
APR 22...	7.5	3.1	11	4.6	7.2	4.3	7.4	4.2	.12	5.6	.00

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								895	701			
2								912	663			
3								910	---			
4								904	---			
5								907	---			
6								899	---			
7								867	---			
8								865	---			
9								888	---			
10								900	---			
11								850	---			
12								798	---			
13								807	---			
14								794	---			
15								790	---			
16								721	---			
17								748	---			
18								728	---			
19								718	---			
20								701	---			
21								687	---			
22								684	---			
23								688	---			
24								674	---			
25								---	---			
26								---	---			
27								---	---			
28								707	---			
29								685	---			
30								690	---			
31								688	---			

BEST DOCUMENT AVAILABLE

09306036 SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°49'30", long 108°11'56", in SW¼NW¼ sec.5, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 1,400 ft (430 m) upstream from mouth and 14.8 mi (23.8 km) west of Rio Blanco.

DRAINAGE AREA.--3.62 mi² (9.38 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,372 ft (1,942.2 m), from topographic map.

REMARKS.--Records excellent except for periods of flow, which are poor.

AVERAGE DISCHARGE.--6 years, 0.006 ft³/s (0.001 m³/s) 4.3 acre-ft/yr (5,300 m³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59 ft³/s (1.67 m³/s) Sept. 3, 1977, gage height, 2.92 ft (0.890 m), from rating curve extended above 40 ft³/s (1.13 m³/s), from slope-area measurement; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.4 ft³/s (0.040 m³/s) at 1630 July 2, gage height, 1.76 ft (0.536 m); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

JUL 2	0.06	JUL 3	0.01

CAL YR 1979	TOTAL 0.00	MEAN 0.000	MAX 0.00	MIN 0.00	AC-FT 0.00
WTR YR 1980	TOTAL 0.07	MEAN 0.000	MAX 0.06	MIN 0.00	AC-FT 0.1

09306036 SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to current year.
WATER TEMPERATURE: October 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1974. Pumping sediment sampler since October 1974.

REMARKS.--Flow occurred only on days indicated. Sample collected Aug. 19, 1980, was obtained during a partial day runoff event.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Not determined.
SEDIMENT CONCENTRATIONS: Maximum daily, 7,200 mg/L estimated Aug. 1; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 14 tons (13 t) estimated Aug. 1; no flow many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	ALKALINITY FIELD (MG/L AS CACO3)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
AUG 19...	1000	E.01	2250	8.2	17.0	1040	130	63	0	16	5.4	590

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	BROMIDE DISSOLVED (MG/L AS BR)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
AUG 19...	33	4.2	.0	240	9.2	1.0	.00	20	1530	2.0	E.04	3.1

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, DISSOLV (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
AUG 19...	.000	4.1	1.0	1.0	.900	10	930	70	10	17	3

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)
AUG 19...	0	100	0	0	4	5	0	.0	14	0	440	40

DATE	GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)	CYANIDE TOTAL (MG/L AS CN)
AUG 19...	< 20	120	< 30	180	< 13	120	< 12	110	.09	1.4	.00

E ESTIMATED.

09306036 SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1							---	---				
2							25.5	16.0				
3							17.0	15.0				
4							---	---				
5							---	---				
6							---	---				
7							---	---				
8							---	---				
9							---	---				
10							---	---				
11							---	---				
12							---	---				
13							---	---				
14							---	---				
15							---	---				
16							---	---				
17							---	---				
18							---	---				
19							---	---				
20							---	---				
21							---	---				
22							---	---				
23							---	---				
24							---	---				
25							---	---				
26							---	---				
27							---	---				
28							---	---				
29							---	---				
30							---	---				
31							---	---				

09306036 SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.00		---	.00			.00		
2	.06		.02	.00			.00		
3	.01		.01	.00			.00		
4	.00		---	.00			.00		
5	.00		---	.00			.00		
6	.00		---	.00			.00		
7	.00		---	.00			.00		
8	.00		---	.00			.00		
9	.00		---	.00			.00		
10	.00		---	.00			.00		
11	.00		---	.00			.00		
12	.00		---	.00			.00		
13	.00		---	.00			.00		
14	.00		---	.00			.00		
15	.00		---	.00			.00		
16	.00		---	.00			.00		
17	.00		---	.00			.00		
18	.00		---	.00			.00		
19	.00		---	.00			.00		
20	.00		---	.00			.00		
21	.00		---	.00			.00		
22	.00		---	.00			.00		
23	.00		---	.00			.00		
24	.00		---	.00			.00		
25	.00		---	.00			.00		
26	.00		---	.00			.00		
27	.00		---	.00			.00		
28	.00		---	.00			.00		
29	.00		---	.00			.00		
30	.00		---	.00			.00		
31	.00		---	.00			---		
TOTAL	0.07		0.03	0.00			0.00		
YEAR	0.07		0.03						

09306039 COTTONWOOD GULCH NEAR RIO BLANCO, CO

LOCATION.--Lat 39°49'36", long 108°12'25", in SW¼SE¼ sec.31, T.2 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 800 ft (240 m) upstream from mouth and 15.4 mi (24.8 km) west of Rio Blanco.

DRAINAGE AREA.--1.20 mi² (3.11 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,353 ft (1,936 m), from topographic map.

REMARKS.--Records fair for periods of flow. No diversion above station.

AVERAGE DISCHARGE.--6 years, 0.01 ft³/s (0.001 m³/s), 7.24 acre-ft/yr (0.009 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53 ft³/s (1.50 m³/s) Sept. 3, 1977, gage height, 2.94 ft (0.896 m); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.5 ft³/s (0.042 m³/s) at 1600 Feb. 18, gage height, 1.57 ft (0.479 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.15	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.14	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.01	.00	.01	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.04	.00
22	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.02	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.31	.00	.14	.00	.00	.03	.04	.00
MEAN	.000	.000	.000	.000	.011	.000	.005	.000	.000	.001	.001	.000
MAX	.00	.00	.00	.00	.15	.00	.05	.00	.00	.03	.04	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.6	.00	.3	.00	.00	.06	.08	.00

CAL YR 1979 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00
WTR YR 1980 TOTAL 0.52 MEAN .001 MAX .15 MIN .00 AC-FT 1.0

BEST DOCUMENT AVAILABLE

09306039 COTTONWOOD GULCH NEAR RIO BLANCO, CO

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1976. Automatic pumping sediment sampler since April 1974.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 225 micromhos Mar. 24, 1976; minimum, 124 micromhos Mar. 27, 1976.
WATER TEMPERATURES: Maximum, 25.0°C Mar. 27, 1976; minimum, 4.5°C Mar. 24, 1976.
SEDIMENT CONCENTRATIONS: Maximum daily, 62,000 mg/L estimated Sept. 3, 1977; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 200 tons (181 t) estimated Sept. 3, 1977; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Not determined.
SEDIMENT CONCENTRATIONS: Not determined.
SEDIMENT LOADS: Not determined.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALKALINITY FIELD (MG/L AS CACO3)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
APR 23...	1405	E.01	910	8.4	17.0	7.3	300	15	300	0

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)
APR 23...	48	43	100	2.5	1.5	.0	170	15	.7

E ESTIMATED.

09306039 COTTONWOOD GULCH NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, DISSOLV (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
APR									
23...	.30	16	578	.79	E.02	.24	.000	.94	.70

DATE	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
APR									
23...	.70	.120	2	100	< 10	5	9.2	.2	2

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)
APR												
23...	20	90	< 1	0	3	3	20	.0	< 10	2	2200	< 3

DATE	GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CYANIDE TOTAL (MG/L AS CN)
APR											
23...	6.3	.4	9.2	.6	< 4.4	< .4	< 4.5	< .4	.07	5.4	.00

E ESTIMATED.

09306039 COTTONWOOD GULCH NEAR RIO BLANCO, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---			---		
2							---			2660		
3							---			---		
4							---			---		
5							---			---		
6							---			---		
7							---			---		
8							---			---		
9							---			---		
10							---			---		
11							---			---		
12							---			---		
13							---			---		
14							---			---		
15							---			---		
16							---			---		
17							---			---		
18							---			---		
19							---			---		
20							---			---		
21							---			---		
22							---			---		
23							957			---		
24							955			---		
25							950			---		
26							---			---		
27							---			---		
28							---			---		
29							---			---		
30							955			---		
31							---			---		

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---					---	---				
2	---	---					23.5	19.5				
3	---	---					---	---				
4	---	---					---	---				
5	---	---					---	---				
6	---	---					---	---				
7	---	---					---	---				
8	---	---					---	---				
9	---	---					---	---				
10	---	---					---	---				
11	---	---					---	---				
12	---	---					---	---				
13	---	---					---	---				
14	---	---					---	---				
15	---	---					---	---				
16	---	---					---	---				
17	---	---					---	---				
18	---	---					---	---				
19	---	---					---	---				
20	---	---					---	---				
21	---	---					---	---				
22	---	---					---	---				
23	20.0	5.5					---	---				
24	14.0	3.0					---	---				
25	15.5	.0					---	---				
26	---	---					---	---				
27	---	---					---	---				
28	---	---					---	---				
29	---	---					---	---				
30	10.5	7.5					---	---				
31	---	---					---	---				

09306039 COTTONWOOD GULCH NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.00			.00		---	.00		
2	.00			.00		---	.00		
3	.00			.00		---	.00		
4	.00			.00		---	.00		
5	.00			.00		---	.00		
6	.00			.00		---	.00		
7	.00			.00		---	.00		
8	.00			.00		---	.00		
9	.00			.00		---	.00		
10	.00			.00		---	.00		
11	.00			.00		---	.00		
12	.00			.00		---	.00		
13	.00			.00		---	.00		
14	.00			.00		---	.00		
15	.00			.00		---	.00		
16	.00			.01		.00	.00		
17	.00			.00		---	.00		
18	.00			.15		.15	.00		
19	.00			.14		.15	.00		
20	.00			.01		.00	.00		
21	.00			.00		---	.00		
22	.00			.00		---	.00		
23	.00			.00		---	.00		
24	.00			.00		---	.00		
25	.00			.00		---	.00		
26	.00			.00		---	.00		
27	.00			.00		---	.00		
28	.00			.00		---	.00		
29	.00			.00		---	.00		
30	.00			---			.00		
31	.00			---			.00		
TOTAL	0.00			0.31		0.30	0.00		

BEST DOCUMENT AVAILABLE

09306019 COTTONWOOD GULCH NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	.00	---	---	.00			.00		
2	.00	---	---	.00			.00		
3	.00	---	---	.00			.00		
4	.00	---	---	.00			.00		
5	.00	---	---	.00			.00		
6	.00	---	---	.00			.00		
7	.00	---	---	.00			.00		
8	.00	---	---	.00			.00		
9	.00	---	---	.00			.00		
10	.00	---	---	.00			.00		
11	.00	---	---	.00			.00		
12	.00	---	---	.00			.00		
13	.00	---	---	.00			.00		
14	.00	---	---	.00			.00		
15	.00	---	---	.00			.00		
16	.00	---	---	.00			.00		
17	.00	---	---	.00			.00		
18	.00	---	---	.00			.00		
19	.00	---	---	.00			.00		
20	.01	---	.00	.00			.00		
21	.01	---	.00	.00			.00		
22	.01	---	.00	.00			.00		
23	.03	50	.00	.00			.00		
24	.05	---	.05	.00			.00		
25	.01	---	.00	.00			.00		
26	.00	---	---	.00			.00		
27	.00	---	---	.00			.00		
28	.00	---	---	.00			.00		
29	.00	---	---	.00			.00		
30	.02	---	.00	.00			.00		
31	---	---	---	.00			---		
TOTAL	0.14	---	0.05	0.00			0.00		

09306039 COTTONWOOD GULCH NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.00		---	.00		---	.00		
2	.03		.03	.00		---	.00		
3	.00		---	.00		---	.00		
4	.00		---	.00		---	.00		
5	.00		---	.00		---	.00		
6	.00		---	.00		---	.00		
7	.00		---	.00		---	.00		
8	.00		---	.00		---	.00		
9	.00		---	.00		---	.00		
10	.00		---	.00		---	.00		
11	.00		---	.00		---	.00		
12	.00		---	.00		---	.00		
13	.00		---	.00		---	.00		
14	.00		---	.00		---	.00		
15	.00		---	.00		---	.00		
16	.00		---	.00		---	.00		
17	.00		---	.00		---	.00		
18	.00		---	.00		---	.00		
19	.00		---	.00		---	.00		
20	.00		---	.00		---	.00		
21	.00		---	.04		.04	.00		
22	.00		---	.00		---	.00		
23	.00		---	.00		---	.00		
24	.00		---	.00		---	.00		
25	.00		---	.00		---	.00		
26	.00		---	.00		---	.00		
27	.00		---	.00		---	.00		
28	.00		---	.00		---	.00		
29	.00		---	.00		---	.00		
30	.00		---	.00		---	.00		
31	.00		---	.00		---	---		
TOTAL	0.03		0.03	0.04		0.04	0.00		
YEAR	0.52		0.42						

BEST DOCUMENT AVAILABLE

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO

LOCATION.--Lat 39°50'01", long 108°13'12", in SE1/4NE1/4 sec.36, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 600 ft (180 m) upstream from mouth and 16.2 mi (26.1 km) west of Rio Blanco.

DRAINAGE AREA.--1.06 mi² (2.75 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

REVISED RECORDS.--WDR CO-79-3: 1977(M).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,335 ft (1,931 m), from topographic map.

REMARKS.--Records good except for period of no gage-height record, which are poor. All flow due to discharge of settling ponds on tract Cb.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 386 ft³/s (10.9 m³/s), Sept. 3, 1977, gage height, 2.57 ft (0.783 m), result of slope-area measurement of peak flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.3 ft³/s (0.093 m³/s) at 0800 Aug. 16, gage height, 2.24 ft (0.683 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	.00	.00	.03	.30	.20	.05	.00	.00	.52	.00	.60
2	.25	.00	.00	.04	.30	.20	.05	.00	.00	.74	.00	.70
3	.00	.00	.00	.03	.30	.20	.05	.00	.00	.72	.00	1.2
4	.30	.00	.00	.02	.30	.20	.04	.04	.00	.71	.00	1.2
5	.05	.20	.00	.02	.30	.20	.04	.00	.00	.65	.00	1.4
6	.15	.00	.00	.02	.30	.20	.04	.00	.00	.16	.00	1.4
7	.00	.00	.15	.03	.30	.20	.02	.13	.00	.60	.55	1.5
8	.15	.20	.20	.00	.10	.50	.10	.51	.00	.65	.68	1.4
9	.20	.50	.00	.00	.00	.20	.40	.71	.00	.70	1.2	1.4
10	.00	.00	.00	.10	.00	.30	.40	.74	.12	.76	1.2	1.4
11	.60	.00	.00	.05	.00	.20	.57	.80	.72	.98	1.3	1.4
12	.15	.00	.00	.03	.00	.30	.50	.81	.67	1.1	1.4	1.0
13	.00	.15	.00	.03	.00	.20	.50	.76	.00	1.1	1.7	1.5
14	.00	.10	.05	.03	.00	.20	.40	.79	.00	1.2	1.7	1.9
15	.00	.00	.10	.03	.60	.50	.70	.87	.00	1.2	1.8	1.4
16	.00	.00	.10	.03	1.0	.40	.60	.96	.00	1.1	1.8	1.4
17	.50	.00	.05	.02	1.0	.20	.64	.97	.00	.61	1.1	1.5
18	.70	.00	.05	.03	1.0	.05	.73	.91	.24	.37	1.2	1.5
19	.65	.00	.10	.05	1.0	.00	.86	.84	.00	.00	1.7	1.4
20	.60	.00	.10	1.0	1.0	.20	.91	.36	.00	.00	1.6	1.5
21	.00	.10	.10	.20	1.0	.20	1.0	.00	.00	.36	1.0	1.5
22	.00	.40	.10	.03	.40	.20	.90	.00	.00	1.1	1.5	1.5
23	.00	.00	.10	.00	.40	.20	.30	.00	.00	1.2	1.5	1.5
24	.00	.25	.10	.01	.40	.10	.00	.00	.20	1.2	1.1	1.4
25	.00	.15	.00	.00	.40	.10	.29	.00	.23	1.2	1.6	1.6
26	.00	.00	.05	.05	.40	.10	.13	.00	.15	1.2	1.3	1.8
27	.00	.00	.15	.02	.40	.10	.04	.00	.11	1.2	1.3	1.8
28	.30	.10	.15	.02	.40	.10	.80	.00	.18	.67	1.2	1.6
29	.00	.15	.15	.02	.15	.10	.07	.00	.20	.00	1.2	1.6
30	.45	.10	.00	.02	---	.05	.42	.00	.29	.00	.90	1.6
31	.45	---	.00	.05	---	.05	---	.00	---	.00	.70	---
TOTAL	6.25	2.40	1.80	2.01	11.75	5.95	12.36	10.18	2.91	21.80	32.43	42.60
MEAN	.20	.080	.058	.065	.41	.19	.41	.33	.097	.70	1.05	1.42
MAX	.70	.50	.20	1.0	1.0	.50	1.0	.97	.72	1.2	1.8	1.9
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.60
AC-FT	12	4.8	3.6	4.0	23	12	25	20	5.8	43	65	84

CAL YR 1979 TOTAL 11.78 MEAN .032 MAX .70 MIN .00 AC-FT 23
WTR YR 1980 TOTAL 152.64 MEAN .42 MAX 1.9 MIN .00 AC-FT 303

NOTE.--NO GAGE-HEIGHT RECORD OCT. 1 TO APR. 16.

BEST DOCUMENT AVAILABLE

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler since April 1974.

REMARKS.--Flow occurred only on days shown.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,570 micromhos Sept. 16, 1980; minimum, 958 micromhos July 2, 1980.
WATER TEMPERATURES: Maximum, 31.5°C June 30, July 1, 1980; minimum, 0.0°C Sept. 6, 1980.
SEDIMENT CONCENTRATIONS: Maximum daily, 28,000 mg/L estimated Sept. 3, 1978; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 900 tons (820 t) estimated Sept. 3, 1978; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,570 micromhos Sept. 16; minimum, 958 micromhos July 2.
WATER TEMPERATURES: Maximum, 31.5°C June 30, July 1; minimum, 0.0°C Sept. 6.
SEDIMENT CONCENTRATIONS: Maximum daily, 19,500 mg/L Apr. 9; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 40 tons (36 t) Feb. 16-21; no flow many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALKALINITY FIELD (MG/L AS CACO3)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT										
18...	1230	.01	1220	8.7	15.0	7.6	190	--	--	--
NOV										
30...	1410	.34	1460	8.7	.0	11.6	440	26	4000	K10
DEC										
08...	0850	.35	1440	8.6	.0	11.2	490	--	--	--
JAN										
20...	0925	1.4	1500	8.6	.0	11.4	300	--	--	--
FEB										
19...	1605	1.2	650	8.6	.0	10.2	250	--	--	--
MAR										
26...	1230	E.10	1760	8.2	17.0	8.3	590	15	--	--
MAY										
13...	1315	.76	1600	8.4	13.0	8.6	560	35	--	--
JUN										
12...	1230	.01	1700	8.3	23.5	6.8	520	--	--	--
JUL										
16...	1245	1.2	1800	8.6	26.5	6.4	640	--	--	--
AUG										
18...	1310	1.5	2400	8.4	23.5	7.0	1110	19	K800	< 4
SEP										
15...	1310	E1.4	2300	8.6	22.5	6.6	960	--	--	--

E ESTIMATED.

K BASED ON NON-IDEAL COLONY COUNT.

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT 18...	--	160	0	35	18	220	7.5	6.7	--	410
NOV 30...	180	190	0	38	23	280	8.9	6.4	--	300
DEC 08...	--	180	0	34	22	290	9.5	4.7	--	250
JAN 20...	--	170	0	39	17	280	9.4	6.3	--	430
FEB 19...	--	78	0	19	7.5	120	5.9	4.1	--	140
MAR 26...	--	110	0	21	13	410	17	5.7	.0	300
MAY 13...	--	89	0	17	11	370	17	6.2	.0	260
JUN 12...	--	82	0	18	9.0	380	18	5.6	--	370
JUL 16...	--	74	0	17	7.6	410	22	5.4	--	300
AUG 18...	600	73	0	15	8.4	600	31	4.4	.0	180
SEP 15...	--	68	0	16	6.7	550	29	5.8	--	320

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, DISSOLV (MG/L AS N)
OCT 18...	8.8	3.5	--	53	891	1.2	2.1	4.8	.210	5.9
NOV 30...	8.7	6.0	.10	38	1000	1.3	.92	7.4	1.90	8.2
DEC 08...	8.1	7.0	--	27	966	1.3	.91	6.4	2.00	9.0
JAN 20...	15	6.9	--	7.6	1010	1.3	3.8	6.5	1.80	9.2
FEB 19...	6.8	2.7	--	32	491	.67	1.6	1.9	.850	3.6
MAR 26...	8.2	12	.10	44	1190	1.6	E.32	5.2	2.30	8.0
MAY 13...	5.9	12	.10	7.5	1040	1.4	2.1	2.4	.160	3.1
JUN 12...	6.5	.6	--	58	1170	1.5	2.5	2.1	.380	3.0
JUL 16...	6.5	17	--	43	1230	1.6	3.9	3.5	.140	4.3
AUG 18...	7.8	1.6	.10	18	1520	2.0	6.1	2.9	.520	3.8
SEP 15...	8.2	--	--	42	1520	E2.0	E4.1	1.6	.020	2.0

E ESTIMATED.

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT 18...	.89	1.1	--	4	190	110	2	3.8	1.4	2
NOV 30...	--	--	.200	9	410	110	4	33	.9	2
DEC 08...	.60	2.6	.100	9	370	40	5	22	--	3
JAN 20...	.90	2.7	.630	5	250	20	20	10	--	1
FEB 19...	.85	1.7	2.60	3	220	330	10	12	39	7
MAR 26...	.50	2.8	1.20	13	560	30	2	8.9	--	2
MAY 13...	.57	.73	.250	21	580	10	2	31	1.8	1
JUN 12...	.51	.89	.080	13	590	30	< 3	20	2.1	0
JUL 16...	.66	.80	.090	16	740	20	< 3	14	1.6	3
AUG 18...	.39	.91	.190	12	800	30	10	17	2.1	0
SEP 15...	.41	.43	.070	7	690	30	3	18	1.6	8

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 30...	50	100	< 1	0	0	0	40	.0	29	0	1700	< 3
MAR 26...	10	100	< 1	0	2	0	40	.0	18	0	750	< 3
MAY 13...	60	90	< 1	0	2	0	20	.0	24	1	920	< 3
AUG 18...	10	100	0	0	3	2	20	.0	9	0	1000	20

DATE	GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	CYANIDE TOTAL (MG/L AS CN)
NOV 30...	< 11	5.4	< 16	7.9	6.5	7.0	6.6	7.1	.07	4.2	.03
MAR 26...	< 1.9	43	< 2.8	63	2.3	60	2.3	62	.09	2.4	.03
MAY 13...	< 8.8	7.5	< 13	11	< 8.2	6.0	< 7.8	5.7	.06	2.2	.00
AUG 18...	< 16	10	< 23	15	< 12	11	< 12	10	.08	1.0	.01

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
AUG												
06...	1835	.28	26500	20	16	29	51	74	78	84	90	93
06...	1915	.35	22000	21	31	44	66	--	--	--	--	--
06...	1916	.34	22000	20	31	44	66	91	95	96	97	98

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
OCT												
18...	1025	--	37100	--	15	20	46	87	97	99	99	100
18...	1045	.14	21900	8.3	17	22	48	89	96	99	100	--
18...	1145	.21	17500	9.9	17	22	42	83	96	93	99	100
18...	1235	.28	7320	5.5	--	--	--	12	--	--	--	--
FEB												
19...	1603	.15	76600	31	3	4	8	14	19	27	37	46
19...	1608	1.5	21400	87	--	--	--	30	--	--	--	--
19...	1616	1.5	15700	64	--	--	--	46	--	--	--	--
19...	1622	.15	55500	22	3	3	6	10	13	18	25.	34
MAR												
26...	1230	E.10	2700	--	--	--	--	52	--	--	--	--
26...	1237	--	14900	--	--	--	--	11	--	--	--	--
26...	1242	--	12400	--	--	--	--	18	--	--	--	--
APR												
16...	1407	.67	11370	21	--	--	--	12	--	--	--	--
21...	1130	.90	1220	3.0	--	--	--	7	--	--	--	--
MAY												
20...	1007	.78	126	.27	--	--	--	70	--	--	--	--

E ESTIMATED

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1350	---	---	---	---	---	---	---	---	1730	---	---
2	1310	---	---	---	---	---	---	---	---	1460	---	---
3	---	---	---	---	---	---	1800	---	---	1720	---	---
4	---	---	---	---	---	---	---	1790	---	1770	---	---
5	---	---	---	---	---	---	---	---	---	1670	---	---
6	---	---	---	---	---	---	---	---	---	1680	---	---
7	---	---	---	---	---	---	---	---	---	1700	---	---
8	---	---	1400	---	---	---	2100	1890	---	1770	---	---
9	---	---	---	---	---	---	2100	2030	---	1770	---	2210
10	---	---	---	---	---	---	---	1930	1830	1740	---	2140
11	---	---	---	---	---	---	---	1790	1730	1810	---	2140
12	---	---	---	---	---	---	---	1740	1760	1740	---	2170
13	---	---	---	---	---	---	---	1690	---	1600	---	2200
14	---	---	---	---	---	---	---	1690	---	1610	---	2360
15	---	---	---	---	---	---	2090	1830	---	1500	---	2400
16	---	---	---	---	---	---	2100	1830	---	1520	---	2370
17	---	---	---	---	---	---	2040	1770	---	---	---	2500
18	1220	---	---	---	---	---	---	1750	1740	---	---	2490
19	---	---	---	---	650	---	---	1750	---	---	---	2420
20	---	---	---	1500	---	---	---	1890	---	---	---	2250
21	---	---	---	---	---	---	1690	---	---	---	2180	2110
22	---	---	---	---	---	---	---	---	---	---	2400	2190
23	---	---	---	---	---	---	---	---	---	---	2330	2370
24	---	---	---	---	---	---	---	---	1580	1930	2150	2330
25	---	---	---	---	---	---	1700	---	1770	1810	2110	2310
26	---	---	---	---	---	1700	---	---	---	1700	---	2320
27	---	---	---	---	1020	---	---	---	---	1800	---	2310
28	---	---	---	---	---	---	---	---	---	1800	2040	2300
29	---	---	---	---	---	---	---	---	---	---	2020	2300
30	---	1400	---	---	---	---	---	---	1820	---	2050	2190
31	---	---	---	---	---	---	---	---	---	---	---	---

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.5	13.0	---	---								
2	6.5	5.5	---	---								
3	---	---	---	---								
4	---	---	---	---								
5	5.0	2.0	.5	.0								
6	---	---	---	---								
7	---	---	---	---								
8	---	---	1.5	.0								
9	---	---	7.5	.5								
10	---	---	---	---								
11	---	---	---	---								
12	---	---	---	---								
13	---	---	---	---								
14	---	---	---	---								
15	---	---	---	---								
16	---	---	---	---								
17	---	---	---	---								
18	16.5	10.0	---	---								
19	18.0	10.5	---	---								
20	8.5	1.0	---	---								
21	---	---	---	---								
22	---	---	---	---								
23	---	---	---	---								
24	---	---	---	---								
25	---	---	---	---								
26	---	---	---	---								
27	---	---	---	---								
28	---	---	---	---								
29	---	---	---	---								
30	.0	.0	---	---								
31	.0	.0	---	---								

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	31.5	17.0	---	---	21.5	11.5
2	---	---	---	---	---	---	24.5	17.0	---	---	23.5	13.0
3	---	---	---	---	---	---	30.5	15.5	---	---	24.0	12.0
4	---	---	25.0	16.0	---	---	30.5	14.0	---	---	25.0	11.5
5	---	---	---	---	---	---	30.0	10.0	---	---	25.5	12.0
6	---	---	---	---	---	---	23.0	5.5	---	---	25.0	14.5
7	---	---	15.0	11.0	---	---	26.0	13.5	---	---	22.5	16.0
8	---	---	22.5	9.0	---	---	30.0	15.5	---	---	22.0	15.5
9	---	---	19.0	9.5	---	---	29.0	14.5	28.0	16.5	19.0	15.5
10	---	---	19.5	9.0	19.5	14.5	29.5	16.0	28.5	15.0	21.0	15.5
11	---	---	15.5	8.5	28.0	11.5	29.0	17.0	27.5	12.5	22.0	14.0
12	---	---	15.0	6.5	27.5	10.5	27.5	17.5	27.5	14.5	21.5	12.0
13	---	---	15.5	7.5	---	---	26.5	17.5	25.5	16.0	22.0	13.5
14	---	---	16.0	6.0	---	---	28.0	16.0	27.0	16.5	21.5	13.0
15	12.0	6.5	21.0	7.0	---	---	28.5	14.0	27.0	17.5	22.5	12.0
16	19.5	5.0	19.5	9.0	---	---	27.5	14.0	21.5	14.0	22.0	12.5
17	21.0	5.5	18.0	8.5	---	---	---	---	24.0	5.0	22.5	11.0
18	---	---	21.5	7.0	28.5	9.5	---	---	24.0	7.0	21.5	11.5
19	---	---	24.5	8.5	---	---	---	---	23.5	14.0	21.0	13.0
20	---	---	25.5	9.5	---	---	---	---	25.0	13.0	21.5	12.0
21	21.5	13.0	---	---	---	---	---	---	25.0	14.5	19.5	11.0
22	18.0	7.5	---	---	---	---	---	---	25.0	13.0	20.0	9.0
23	21.5	7.0	---	---	---	---	---	---	23.5	16.0	20.0	9.0
24	---	---	---	---	28.0	19.5	24.0	17.0	23.5	13.5	21.0	9.5
25	20.5	1.0	---	---	28.5	21.5	27.0	14.5	23.0	16.5	20.5	9.0
26	21.5	14.0	---	---	29.0	21.0	28.0	14.0	25.5	15.0	21.0	10.0
27	7.0	6.5	---	---	29.0	24.5	28.0	14.0	---	---	20.5	10.5
28	18.5	4.5	---	---	29.0	21.0	28.0	11.5	---	---	20.0	11.0
29	19.0	8.0	---	---	29.5	22.0	---	---	22.0	14.0	21.0	10.5
30	24.0	13.0	---	---	31.5	18.5	---	---	22.5	12.0	21.5	10.5
31	---	---	---	---	---	---	---	---	19.0	10.5	---	---

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.15	---	5.0	.00	---	---	.00	---	---
2	.25	---	10	.00	---	---	.00	---	---
3	.00	---	---	.00	---	---	.00	---	---
4	.30	---	10	.00	---	---	.00	---	---
5	.65	---	20	.20	---	1.0	.00	---	---
6	.15	---	5.0	.00	---	---	.00	---	---
7	.00	---	---	.00	---	---	.15	---	.05
8	.15	---	5.0	.20	---	1.0	.20	118	.05
9	.20	---	5.0	.50	---	10	.00	---	---
10	.00	---	---	.00	---	---	.00	---	---
11	.60	---	20	.00	---	---	.00	---	---
12	.15	---	5.0	.00	---	---	.00	---	---
13	.00	---	---	.15	---	.50	.00	---	---
14	.00	---	---	.10	---	.10	.05	---	.01
15	.00	---	---	.00	---	---	.10	---	.05
16	.00	---	---	.00	---	---	.10	---	.05
17	.50	---	20	.00	---	---	.05	---	.01
18	.70	13300	25	.00	---	---	.05	---	.01
19	.65	---	25	.00	---	---	.10	---	.05
20	.60	---	20	.00	---	---	.10	---	.05
21	.00	---	---	.10	---	.10	.10	---	.05
22	.00	---	---	.40	---	5.0	.10	---	.05
23	.00	---	---	.00	---	---	.10	---	.05
24	.00	---	---	.25	---	1.0	.10	---	.05
25	.00	---	---	.15	---	.50	.00	---	---
26	.00	---	---	.00	---	---	.05	---	.01
27	.00	---	---	.00	---	---	.15	---	.05
28	.30	---	2.0	.10	---	.10	.15	---	.05
29	.00	---	---	.15	---	.50	.15	---	.05
30	.45	---	10	.10	184	.05	.00	---	---
31	.45	---	10	---	---	---	.00	---	---
TOTAL	6.25	---	197.0	2.40	---	19.85	1.80	---	0.69

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.03	---	.00	.30	---	1.0	.20	---	5.0
2	.04	---	.01	.30	---	1.0	.20	---	5.0
3	.03	---	.00	.30	---	1.0	.20	---	5.0
4	.02	---	.00	.30	---	1.0	.20	---	5.0
5	.02	---	.00	.30	---	1.0	.20	---	5.0
6	.02	---	.00	.30	---	1.0	.20	---	5.0
7	.03	---	.00	.30	---	1.0	.20	---	5.0
8	.00	---	---	.10	---	.10	.50	---	20
9	.00	---	---	.00	---	---	.20	---	5.0
10	.10	---	.05	.00	---	---	.30	---	10
11	.05	---	.01	.00	---	---	.20	---	5.0
12	.03	---	.00	.00	---	---	.30	---	10
13	.03	---	.00	.00	---	---	.20	---	5.0
14	.03	---	.00	.00	---	---	.20	---	5.0
15	.03	45	.00	.60	---	15	.50	---	20
16	.03	---	.00	1.0	---	40	.40	---	15
17	.02	---	.00	1.0	---	40	.20	---	5.0
18	.03	---	.00	1.0	---	40	.05	---	2.0
19	.05	---	.01	1.0	14800	40	.00	---	---
20	1.0	486	1.3	1.0	---	40	.20	---	5.0
21	.20	---	.05	1.0	---	40	.20	---	5.0
22	.03	---	.01	.40	---	15	.20	---	5.0
23	.00	---	---	.40	---	15	.20	---	5.0
24	.01	---	.00	.40	---	15	.10	---	3.0
25	.00	---	---	.40	---	15	.10	---	3.0
26	.05	---	.05	.40	---	15	.10	8950	2.4
27	.02	---	.00	.40	15200	16	.10	---	2.0
28	.02	---	.00	.40	---	15	.10	---	2.0
29	.02	---	.00	.15	---	5.0	.10	---	2.0
30	.02	---	.00	---	---	---	.05	---	.15
31	.05	---	.05	---	---	---	.05	---	.15
TOTAL	2.01	---	1.54	11.75	---	373.10	5.95	---	171.70

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	.05	---	.15	.00	---	---	.00	---	---
2	.05	---	.15	.00	---	---	.00	---	---
3	.05	1280	.17	.00	---	---	.00	---	---
4	.04	---	.10	.04	---	.05	.00	---	---
5	.04	---	.10	.00	---	---	.00	---	---
6	.04	---	.10	.00	---	---	.00	---	---
7	.02	---	.05	.13	---	.20	.00	---	---
8	.10	12900	3.5	.51	---	2.0	.00	---	---
9	.40	18500	20	.71	---	2.0	.00	---	---
10	.40	---	15	.74	---	2.0	.12	20	.03
11	.50	---	20	.80	---	3.0	.72	101	.19
12	.50	---	20	.81	---	3.0	.47	74	.15
13	.50	---	20	.76	---	2.0	.00	---	---
14	.40	---	15	.79	1250	2.6	.00	---	---
15	.70	8580	16	.87	1050	2.4	.00	---	---
16	.68	9410	18	.94	589	1.5	.00	---	---
17	.64	5350	10	.97	691	1.8	.00	---	---
18	.73	7960	18	.91	570	1.3	.24	286	.68
19	.86	---	8.0	.84	378	.81	.00	---	---
20	.91	---	2.0	.36	69	.13	.00	---	---
21	1.0	1080	4.5	.00	---	---	.00	---	---
22	.90	568	1.6	.00	---	---	.00	---	---
23	.30	57	.09	.00	---	---	.00	---	---
24	.00	---	.00	.00	---	---	.20	220	.42
25	.29	---	2.0	.00	---	---	.23	303	.68
26	.13	146	.23	.00	---	---	.15	193	.32
27	.04	---	.05	.00	---	---	.11	129	.15
28	.80	---	3.0	.00	---	---	.18	164	.27
29	.87	---	3.0	.00	---	---	.20	87	.18
30	.42	---	1.0	.00	---	---	.29	122	.19
31	---	---	---	.00	---	---	---	---	---
TOTAL	12.36	---	201.79	10.18	---	24.79	2.91	---	3.26

BEST DOCUMENT AVAILABLE

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.52	635	.96	.00	---	---	.60	---	.10
2	.74	692	1.6	.00	---	---	.70	---	.10
3	.72	142	.27	.00	---	---	1.2	---	.30
4	.71	67	.12	.00	---	---	1.2	---	.30
5	.65	54	.09	.00	---	---	1.4	---	.60
6	.16	107	.12	.00	---	---	1.4	---	.40
7	.60	56	.06	.55	345	.97	1.5	---	.40
8	.65	69	.12	.68	272	.68	1.4	---	.40
9	.70	29	.05	1.2	126	.40	1.4	141	.53
10	.76	27	.06	1.2	268	.92	1.4	235	.92
11	.98	597	1.8	1.3	181	.68	1.4	261	1.1
12	1.1	318	.94	1.8	543	2.7	1.0	---	.10
13	1.1	156	.46	1.7	207	.95	1.5	---	1.0
14	1.2	81	.26	1.7	166	.76	1.9	---	2.5
15	1.2	51	.17	1.8	342	1.7	1.4	159	.60
16	1.1	32	.10	1.8	1330	7.0	1.4	121	.48
17	.61	20	.06	1.1	---	2.0	1.5	108	.44
18	.37	34	.10	1.2	610	2.0	1.5	57	.23
19	.00	---	---	1.7	---	1.0	1.4	52	.20
20	.00	---	---	1.6	---	.40	1.5	54	.22
21	.36	71	.19	1.0	---	.10	1.5	65	.26
22	1.1	98	.29	1.5	---	.40	1.5	68	.28
23	1.2	75	.24	1.5	---	.40	1.5	115	.48
24	1.2	100	.32	1.1	---	.20	1.4	142	.55
25	1.2	100	.32	1.6	---	.60	1.6	101	.44
26	1.2	70	.23	1.3	---	.40	1.8	119	.58
27	1.2	38	.12	1.3	---	.40	1.8	92	.45
28	.47	15	.02	1.2	---	.30	1.6	103	.44
29	.00	---	---	1.2	---	.30	1.6	139	.60
30	.00	---	---	.90	---	.20	1.6	113	.49
31	.00	---	---	.70	---	.10	---	---	---
TOTAL	21.80	---	9.07	32.63	---	25.56	42.60	---	15.49
YEAR	152.64		1043.84						

BEST DOCUMENT AVAILABLE

09306050 SCANDARD GULCH NEAR RIO BLANCO, CO

LOCATION.--Lat 39°47'38", long 108°13'40", in NE¼NW¼ sec.13, T.3 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 50 ft (15 m) downstream from Little Scandard Gulch and 15.8 mi (25.4 km) west of Rio Blanco.

DRAINAGE AREA.--6.61 mi² (17.12 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, March 1978 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,646 ft (2,025.7 m), from topographic map.

REMARKS.--Records excellent except for day of flow, which is poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11 ft³/s (0.31 m³/s) July 29, 1978, gage height, 1.74 ft (0.530 m); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge unknown, maximum gage height, unknown; no flow most of the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

```
                    FEB 19       .01

CAL YR 1979  TOTAL 0.00   MEAN .000   MAX .00   MIN .00   AC-FT .00
WTR YR 1980  TOTAL 0.01   MEAN .000   MAX .01   MIN .00   AC-FT .02
```

09306050 SCANDARD GULCH NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, March 1978 to current year, revised.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to September 1976, March 1978 to current year, revised.
WATER TEMPERATURE: April 1974 to September 1976, March 1978 to current year, revised.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to September 1976, March 1978 to current year, revised.

INSTRUMENTATION.--Water-quality monitor since April 1974. Automatic pumping sediment sampler since April 1974.

REMARKS.--Flow only on days shown.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily, 1,400 mg/L Mar. 5, 1975; no flow on many days each year.
SEDIMENT LOADS: Maximum daily, 8.0 tons (7.0 t) estimated Mar. 17, 1976; no flow many days each year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALKA-LINITY FIELD (MG/L AS CACO3)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
FEB												
19...	1310	< .01	108	7.3	.0	10.0	37	K24	K10	5100	43	6

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
FEB												
19...	15	1.4	1.6	.1	6.1	17	3.4	.1	3.1	70	.10	.08

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, DISSOLV (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
FEB												
19...	.100	.74	.56	.66	.230	1	150	30	< 1	25	1.5	13

K BASED ON NON-IDEAL COLONY COUNT.

09306050 SCANDARD GULCH NEAR RIO BLANCO, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---							
2					---							
3					---							
4					---							
5					---							
6					---							
7					---							
8					---							
9					---							
10					---							
11					---							
12					---							
13					---							
14					---							
15					---							
16					---							
17					---							
18					---							
19					95							
20					---							
21					---							
22					---							
23					---							
24					---							
25					---							
26					---							
27					---							
28					---							
29					---							
30					---							
31					---							

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1									---	---		
2									---	---		
3									---	---		
4									---	---		
5									---	---		
6									---	---		
7									---	---		
8									---	---		
9									---	---		
10									---	---		
11									---	---		
12									---	---		
13									---	---		
14									---	---		
15									---	---		
16									---	---		
17									---	---		
18									---	---		
19									.0	.0		
20									---	---		
21									---	---		
22									---	---		
23									---	---		
24									---	---		
25									---	---		
26									---	---		
27									---	---		
28									---	---		
29									---	---		
30									---	---		
31									---	---		

09306052 SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°48'51", long 108°14'35", in SW¼SE¼ sec.2, T.3 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 2,100 ft (640 m) upstream from mouth and 16.8 mi (27.0 km) west of Rio Blanco.

DRAINAGE AREA.--7.97 mi² (20.64 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, November 1977 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,434 ft (1,961.1 m), from topographic map.

REMARKS.--Records excellent except for days of flow which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6.0 ft³/s (0.17 m³/s) July 29, 1978, gage height 1.18 ft (0.360 m); maximum gage height, 1.65 ft (0.503 m), Mar. 4, 1975 (backwater from ice); no flow most days of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.6 ft³/s (0.074 m³/s) at 1500 Feb. 20, gage height 1.05 ft (0.320 m); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	1.8	.01	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	2.4	.01	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.16	.01	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	4.36	.05	.00	.00	.00	.00	.00	.00
MEAN	.000	.000	.000	.000	.15	.002	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	2.4	.01	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	8.6	.10	.00	.00	.00	.00	.00	.00

CAL YR 1979 TOTAL 1.28 MEAN .004 MAX .73 MIN .00 AC-FT 2.5
WTR YR 1980 TOTAL 4.41 MEAN .012 MAX 2.4 MIN .00 AC-FT 8.7

09306052 SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1976 to September 1976, November 1977 to current year, revised.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1976 to September 1976, November 1977 to current year, revised.
WATER TEMPERATURE: April 1976 to September 1976, November 1977 to current year, revised.
SUSPENDED SEDIMENT DISCHARGE: April 1976 to September 1976, November 1977 to current year, revised.

INSTRUMENTATION.--Water-quality monitor since April 1976. Automatic pumping sediment sampler since April 1976.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 425 micromhos Mar. 18, 1976; minimum, 167 micromhos July 29, 1978.
WATER TEMPERATURES: Maximum, 22.0°C July 29, 1978; minimum, 0.5°C Feb. 11, 12, 1976.
SEDIMENT CONCENTRATIONS: Maximum daily, 49,030 mg/L July 29, 1978; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 50 tons (45 t) estimated July 29, 1978.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALKA-LINITY FIELD (MG/L AS CACO3)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)
FEB 19...	1730	2.3	220	7.9	.0	10.7	68	140	760	850

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
FEB 19...	6600	68	0	21	3.7	21	1.1	4.0	20	9.5

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, DISSOLV (MG/L AS N)
FEB 19...	.3	.10	8.7	136	.19	.84	.30	.070	1.4

DATE	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	PHENOLS (UG/L)
FEB 19...	1.0	1.1	1.40	3	80	60	10	20	5

* BASED ON NON-IDEAL COLONY COUNT.

09306052 SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	ALUMINUM, DIS-SOLVED (UG/L AS AL)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO)	SELENIUM, DIS-SOLVED (UG/L AS SE)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)
FEB												
19...	110	100	0	0	2	0	0	.0	2	0	180	10

DATE	GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP, TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP, TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP, TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP, TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRACTION (UG/L)	CYANIDE TOTAL (MG/L AS CN)
FEB											
19...	2.5	39	3.7	57	8.5	50	8.4	50	.08	1.3	.00

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---	---						
2					---	---						
3					---	---						
4					---	---						
5					---	---						
6					---	---						
7					---	---						
8					---	---						
9					---	---						
10					---	---						
11					---	---						
12					---	---						
13					---	---						
14					---	---						
15					---	142						
16					---	---						
17					---	---						
18					---	129						
19					220	132						
20					---	136						
21					---	126						
22					---	---						
23					---	---						
24					---	---						
25					---	---						
26					---	---						
27					---	---						
28					---	---						
29					---	---						
30					---	---						
31					---	---						

09306052 SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1									---	---	---	---
2									---	---	---	---
3									---	---	---	---
4									---	---	---	---
5									---	---	---	---
6									---	---	---	---
7									---	---	---	---
8									---	---	---	---
9									---	---	---	---
10									---	---	---	---
11									---	---	---	---
12									---	---	---	---
13									---	---	---	---
14									---	---	---	---
15									---	---	6.5	3.0
16									---	---	---	---
17									---	---	---	---
18									---	---	9.0	.0
19									.0	.0	13.0	.0
20									1.0	.0	16.5	.0
21									.0	.0	19.5	.0
22									---	---	---	---
23									---	---	---	---
24									---	---	---	---
25									---	---	---	---
26									---	---	---	---
27									---	---	---	---
28									---	---	---	---
29									---	---	---	---
30									---	---	---	---
31									---	---	---	---

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.00			.00	---	---	.00		---
2	.00			.00	---	---	.00		---
3	.00			.00	---	---	.00		---
4	.00			.00	---	---	.00		---
5	.00			.00	---	---	.00		---
6	.00			.00	---	---	.00		---
7	.00			.00	---	---	.00		---
8	.00			.00	---	---	.00		---
9	.00			.00	---	---	.00		---
10	.00			.00	---	---	.00		---
11	.00			.00	---	---	.00		---
12	.00			.00	---	---	.00		---
13	.00			.00	---	---	.00		---
14	.00			.00	---	---	.00		.01
15	.00			.00	---	---	.01		.01
16	.00			.00	---	---	.00		---
17	.00			.00	---	---	.00		---
18	.00			.00	---	---	.01		.01
19	.00			1.8	145	1.5	.01		.01
20	.00			2.4	---	4.0	.01		.01
21	.00			.16	---	.15	.01		.01
22	.00			.00	---	---	.00		---
23	.00			.00	---	---	.00		---
24	.00			.00	---	---	.00		---
25	.00			.00	---	---	.00		---
26	.00			.00	---	---	.00		---
27	.00			.00	---	---	.00		---
28	.00			.00	---	---	.00		---
29	.00			.00	---	---	.00		---
30	.00			---	---	---	.00		---
31	.00			---	---	---	.00		---
TOTAL	0.00			4.36	---	5.65	0.05		0.06
YEAR	4.41	-	5.71						

09306058 WILLOW CREEK NEAR RIO BLANCO, CO

LOCATION.--Lat 39°50'14", long 108°14'37", in NW¼NE¼ sec.35, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 1,500 ft (460 m) upstream from mouth and 17.4 mi (28.0 km) west of Rio Blanco.

DRAINAGE AREA.--48.4 mi^{2} (125.4 km^{2}).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Concrete control since Aug. 9, 1974. Altitude of gage is 6,273 ft (1,912 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 315 acres (1.27 km^{2}).

AVERAGE DISCHARGE.--6 years, 2.00 ft^{3}/s (0.057 m^{3}/s) 1,450 acre-ft/yr (1.79 hm^{3}/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23 ft^{3}/s (0.65 m^{3}/s) Sept. 3, 1977, gage height, 4.46 ft (1.359 m); no flow for many days in 1978, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10 ft^{3}/s (0.28 m^{3}/s) at 0900 July 28, gage height, 3.55 ft (1.082 m); maximum gage height, 3.91 ft (1.918 m), Dec. 1 (backwater from ice); minimum daily discharge, 0.18 ft^{3}/s (0.005 m^{3}/s) May 10, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	4.4	2.3	3.4	3.3	4.3	4.1	3.0	1.4	3.5	4.1	5.2
2	5.2	5.2	3.4	3.4	3.3	4.2	4.1	2.9	1.9	3.6	4.3	5.0
3	4.6	5.2	4.4	3.4	3.3	4.3	4.1	2.8	2.2	2.6	4.3	4.8
4	4.6	5.6	4.3	3.3	3.2	4.4	4.1	1.2	1.6	2.8	4.4	4.8
5	4.6	6.0	4.5	3.0	3.2	4.4	4.1	.23	1.1	3.0	4.5	4.9
6	4.9	6.0	4.5	2.7	3.2	4.4	4.1	.25	1.3	3.2	4.5	4.8
7	4.6	5.2	4.4	3.3	3.3	4.3	4.0	.38	1.4	3.5	4.6	4.8
8	4.6	4.4	4.4	3.0	3.0	4.3	3.9	.27	1.4	5.3	5.1	4.9
9	4.4	4.6	4.4	3.0	3.1	4.2	3.9	.20	1.9	5.5	5.6	4.9
10	4.4	4.6	4.5	3.0	3.1	4.3	3.9	.18	3.8	5.5	5.8	4.9
11	4.1	4.6	4.4	3.1	3.1	4.4	3.7	.22	3.2	5.0	6.1	4.9
12	3.9	4.9	3.0	3.2	3.1	4.4	3.4	.20	3.4	4.6	6.3	4.9
13	3.9	4.6	2.5	3.6	3.0	4.4	3.3	.18	4.2	5.3	6.4	4.8
14	4.1	4.4	3.0	3.9	3.1	4.4	3.4	1.1	4.1	6.3	6.4	4.7
15	3.9	4.4	4.0	3.7	3.2	4.5	3.4	2.5	4.0	6.3	6.5	4.7
16	3.7	4.4	3.7	3.6	3.3	4.6	3.7	2.3	3.2	6.3	6.4	4.7
17	3.9	4.3	3.6	3.3	3.3	4.2	3.7	1.9	4.0	5.9	6.3	4.6
18	4.1	4.6	3.6	3.3	4.0	4.4	3.9	2.4	4.5	5.8	6.3	4.6
19	4.1	4.6	3.6	3.2	6.0	4.3	3.6	3.4	4.1	5.6	6.4	4.6
20	4.4	4.6	3.3	3.3	5.3	4.3	2.8	3.5	4.5	5.1	6.2	4.5
21	4.4	4.6	3.2	3.2	4.7	4.3	2.9	3.8	4.5	4.7	5.7	4.5
22	3.9	4.8	3.6	3.2	4.5	4.4	3.0	4.2	4.4	4.5	5.6	4.4
23	3.9	5.1	3.4	3.1	4.4	4.3	2.9	3.7	3.8	4.5	5.6	3.1
24	4.0	4.5	3.3	3.0	4.4	4.3	3.0	2.7	2.2	6.2	5.8	1.2
25	3.7	4.6	3.3	3.3	4.4	4.3	3.0	3.1	3.8	6.2	5.7	1.2
26	3.9	4.6	3.6	3.3	4.4	4.1	3.2	3.0	4.1	5.7	5.7	1.3
27	3.9	4.9	3.4	3.3	4.5	4.1	3.3	3.2	4.0	4.4	5.6	2.8
28	4.4	4.4	3.4	3.3	4.5	4.1	3.3	3.7	3.6	5.7	5.7	7.1
29	5.2	3.7	3.4	3.3	4.4	4.2	3.0	4.0	2.1	5.0	5.7	5.0
30	5.6	2.9	3.4	3.3	---	4.2	3.6	3.7	2.9	4.8	5.7	4.5
31	4.4	---	3.4	3.3	---	4.1	---	1.6	---	3.9	5.7	---
TOTAL	131.5	140.7	113.2	101.3	109.6	133.4	106.4	65.81	92.6	150.3	173.0	131.1
MEAN	4.24	4.69	3.65	3.27	3.78	4.30	3.55	2.12	3.09	4.85	5.58	4.37
MAX	5.6	6.0	4.5	3.9	6.0	4.6	4.1	4.2	4.5	6.3	6.5	7.1
MIN	2.2	2.9	2.3	2.7	3.0	4.1	2.8	.18	1.1	2.6	4.1	1.2
AC-FT	261	279	225	201	217	265	211	131	184	298	343	260

CAL YR 1979 TOTAL 765.98 MEAN 2.10 MAX 6.0 MIN .00 AC-FT 1520
WTR YR 1980 TOTAL 1448.91 MEAN 3.96 MAX 7.1 MIN .18 AC-FT 2870

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1974 to current year.
pH: March 1976 to current year.
DISSOLVED OXYGEN: March 1976 to current year.
WATER TEMPERATURE: November 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1974. Pumping sediment sampler since October 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,920 micromhos July 14, 1976; minimum, 528 micromhos Mar. 18, 1976.
WATER TEMPERATURES: Maximum, 30.0°C July 17, 1976; minimum, 0.0°C on many days during winter months each year.
DISSOLVED OXYGEN: Maximum, 12.9 mg/L Mar. 29, 1979; minimum, 3.6 mg/L Sept. 29, 1978.
pH: Maximum, 8.8 units Mar. 11, 1980; minimum, 7.4 units June 4, 6, 1980.
SEDIMENT CONCENTRATIONS: Maximum daily, 7,030 mg/L July 29, 1979; no flow many days during 1978.
SEDIMENT LOADS: Maximum daily, 61 tons (55 t) July 29, 30, 1979; no flow many days during 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,550 micromhos July 6; minimum, 596 micromhos Feb. 18.
WATER TEMPERATURES: Maximum, 22.5°C May 21; minimum, 0.0°C on many days during November to April.
DISSOLVED OXYGEN: Maximum, 12.7 mg/L Feb. 5; minimum, 5.5 mg/L June 9.
pH: Maximum, 8.8 units Mar. 11; minimum, 7.4 units June 4, 6.
SEDIMENT CONCENTRATIONS: Maximum daily, 753 mg/L June 10; minimum daily, 20 mg/L Sept. 25.
SEDIMENT LOADS: Maximum daily, 10 tons (9.1 t) Nov. 2-5; minimum daily, 0.06 tons (0.05 t) Sept. 25.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	ALKALINITY FIELD (MG/L AS CACO3)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)
OCT										
24...	1305	4.4	1340	8.2	7.0	9.7	410	--	--	--
NOV										
01...	1115	4.2	1290	8.3	2.5	10.9	460	--	--	--
15...	1430	4.4	1270	8.5	7.0	9.7	400	--	--	--
DEC										
13...	1605	2.5	1320	8.4	.0	10.9	410	12	> 800	< 3
JAN										
22...	1345	3.3	1280	8.5	4.5	10.0	390	--	--	--
FEB										
19...	1130	6.2	1080	8.2	4.5	10.8	340	--	--	--
MAR										
19...	1130	4.3	1210	8.3	7.5	9.5	410	--	--	--
25...	1115	4.0	1200	8.1	3.5	10.8	370	--	--	--
APR										
24...	1110	3.2	1250	8.5	10.0	9.8	360	--	--	--
MAY										
06...	1230	.21	1190	8.3	8.0	9.8	240	1	--	--
JUN										
12...	1105	3.9	1300	7.8	16.0	7.8	400	--	--	--
26...	1115	4.1	1350	8.0	16.0	7.5	430	--	--	--
JUL										
16...	1145	6.4	1370	7.9	15.5	7.0	460	--	--	--
AUG										
18...	1430	4.0	1250	8.1	16.5	8.4	380	11	K66	< 4
SEP										
15...	1415	4.9	1180	8.0	14.5	8.7	360	--	--	--
25...	1145	1.5	1330	8.2	8.0	10.4	430	--	--	--

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	BROMIDE DISSOLVED (MG/L AS BR)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, DISSOLV (MG/L AS N)
OCT 24...	14	.4	--	15	876	1.1	10.4	.20	.000	.81
NOV 01...	--	--	--	--	--	--	--	--	--	--
15...	10	.3	--	16	845	1.1	10.0	.70	.010	1.1
DEC 13...	10	.4	.10	17	902	1.2	6.0	.40	.010	2.7
JAN 22...	11	.4	--	16	853	1.1	7.6	.35	.020	1.0
FEB 19...	10	.3	--	14	699	.95	11.7	.32	.240	1.7
MAR 19...	--	--	--	--	--	--	--	--	--	--
25...	10	.0	--	14	808	1.1	8.7	.35	.000	1.0
APR 24...	11	.4	--	15	817	1.1	7.0	.31	.000	.81
MAY 06...	11	.3	.10	13	767	1.0	.43	.05	.010	.52
JUN 12...	10	.1	--	17	848	1.1	8.9	.41	.070	1.2
26...	--	--	--	--	--	--	--	--	--	--
JUL 16...	12	.7	--	18	944	1.2	16.3	.18	.000	.72
AUG 18...	11	.6	.00	17	841	1.1	9.0	.29	.000	.75
SEP 15...	10	.4	--	16	812	1.1	10.7	.41	.010	.76
25...	--	--	--	--	--	--	--	--	--	--

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)
OCT 24...	--	500	94	88	69	110	2.1	2.4	--	330
NOV 01...	--	--	--	--	--	--	--	--	--	--
15...	--	520	120	95	68	110	2.1	2.0	--	300
DEC 13...	250	550	140	98	73	120	2.2	1.5	.1	330
JAN 22...	--	500	110	91	67	120	2.3	1.5	--	310
FEB 19...	--	420	76	76	55	92	2.0	5.6	--	240
MAR 19...	--	--	--	--	--	--	--	--	--	--
25...	--	470	100	86	63	110	2.2	1.3	--	300
APR 24...	--	490	130	82	69	110	2.2	1.4	--	310
MAY 06...	--	460	210	71	68	110	2.2	1.5	.1	350
JUN 12...	--	500	99	86	69	110	2.1	3.2	--	310
26...	--	--	--	--	--	--	--	--	--	--
JUL 16...	--	530	67	89	74	130	2.5	2.4	--	340
AUG 18...	1800	470	89	86	61	110	2.2	2.2	.1	320
SEP 15...	--	470	110	80	66	110	2.2	1.5	--	310
25...	--	--	--	--	--	--	--	--	--	--

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)
OCT										
24...	.61	.61	.020	2	120	50	10	5.3	.2	0
NOV										
01...	--	--	--	--	--	--	--	--	--	--
15...	.41	.42	.040	3	120	120	10	6.0	.3	2
DEC										
13...	2.3	2.3	.050	2	100	< 10	7	6.5	.8	3
JAN										
22...	.64	.66	.130	2	110	10	10	4.6	.6	1
FEB										
19...	1.2	1.4	.350	1	140	70	30	--	3.9	4
MAR										
19...	--	--	--	--	--	--	--	--	--	--
25...	.67	.67	.070	2	110	< 10	10	14	--	0
APR										
24...	.50	.50	.070	1	110	< 10	7	12	.5	5
MAY										
06...	.46	.47	.010	2	130	< 10	2	6.4	.4	6
JUN										
12...	.74	.81	.280	3	160	30	20	20	4.2	1
26...	--	--	--	--	--	--	--	--	--	--
JUL										
16...	.54	.54	.140	2	190	< 10	20	8.4	--	1
AUG										
18...	.46	.46	.080	2	150	< 10	10	7.3	.4	0
SEP										
15...	.34	.35	.010	2	120	< 10	4	5.2	.4	1
25...	--	--	--	--	--	--	--	--	--	--

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)
DEC												
13...	20	60	< 1	0	0	0	7	.0	< 10	1	3100	< 3
MAY												
06...	10	60	< 1	0	2	0	9	.0	< 10	1	2600	< 3
AUG												
18...	0	80	< 1	10	2	0	6	.0	11	1	2700	4

DATE	GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)	CYANIDE TOTAL (MG/L AS CN)
DEC											
13...	< 8.2	< 2.0	< 12	< 3.0	< 7.2	< 3.0	< 6.9	< 3.3	.06	2.6	.00
MAY											
06...	< 6.3	< .3	< 9.2	< .4	< 5.8	< .4	< 5.9	< .4	.06	2.3	.00
AUG											
18...	< 8.2	1.3	< 12	1.9	< 5.9	1.9	< 5.7	1.8	.07	2.1	.00

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
FEB					JUN				
19...	1219	5.8	418	6.5	02...	1406	2.5	361	2.4

BEST DOCUMENT AVAILABLE

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	1220	---	---	1260	1250	1380	1360	1360	1320
2	---	---	---	1210	---	---	1250	1240	1400	1370	1330	1320
3	---	---	---	1220	---	---	1270	1240	1350	1430	1330	1320
4	---	---	---	1220	1150	---	1260	1230	1400	1490	1320	1320
5	---	---	---	1220	1190	1180	1260	---	1420	1520	1290	1300
6	---	---	---	1250	1220	1190	1260	---	1440	1520	1280	1260
7	---	---	---	1240	1210	1180	1270	---	1440	1480	1260	1290
8	---	---	---	1240	1250	1200	1270	---	1410	1410	1260	1290
9	---	---	---	1240	1290	1210	1250	---	1390	1410	---	1310
10	---	1220	---	1210	1260	1200	1250	---	1270	1400	---	1300
11	---	1220	---	1270	1240	1200	1260	---	1300	1410	---	1320
12	---	1230	---	1220	1230	1200	1260	---	1340	---	---	1300
13	---	1240	1230	1170	1220	1220	1250	1220	1320	---	---	1300
14	---	1240	1230	1140	1210	1180	1240	1230	1340	---	---	1300
15	---	1240	1210	1200	1150	1170	1230	1210	1340	---	---	1290
16	1280	---	1190	1220	1110	1190	1230	1190	1380	1360	---	1240
17	1280	---	1200	1220	1130	1240	1220	1190	1360	1360	---	1200
18	1270	---	---	1230	895	1220	1230	1120	1350	1360	---	1190
19	1270	---	---	1220	890	1190	1230	1100	1370	1370	---	1190
20	1260	---	1200	1220	---	1200	1270	1110	1360	1380	---	1190
21	1280	---	---	---	---	1190	1270	1130	1350	1390	1230	1210
22	1290	---	---	1210	---	1190	1260	1130	1350	1390	1260	1220
23	1290	1250	---	1240	---	1220	1270	1170	1360	1360	1250	1260
24	1290	1230	1230	1230	---	1220	1270	1210	1370	1330	1230	1310
25	1280	1230	1220	1210	---	1200	1260	1210	1360	1310	1260	1350
26	1280	1230	1220	1230	---	1220	1260	1240	1350	1310	1260	1370
27	1280	1230	1210	1240	---	1250	1250	1250	1340	1330	1250	1340
28	1270	1260	1210	1190	---	1240	1250	1270	1330	1280	1240	1240
29	1230	---	1230	1190	---	1240	1240	1280	1370	1310	1240	1260
30	1270	---	1240	1250	---	1250	1250	1310	1350	1330	1250	1240
31	---	---	1240	---	---	1250	---	1330	---	1370	1250	---

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	3.0	.5	---	---	---	---
2	---	---	---	---	---	---	3.5	.5	---	---	---	---
3	---	---	---	---	---	---	2.0	.0	---	---	---	---
4	---	---	---	---	---	---	4.0	1.5	7.0	1.5	---	---
5	---	---	---	---	---	---	4.5	.5	5.0	.0	9.0	4.0
6	---	---	---	---	---	---	2.0	.0	5.5	1.0	4.5	2.0
7	---	---	---	---	---	---	3.0	.0	5.0	.5	9.5	1.0
8	---	---	---	---	---	---	3.5	.5	2.5	.0	9.0	1.0
9	---	---	---	---	---	---	4.0	1.5	.0	.0	9.0	.5
10	---	---	6.0	1.0	---	---	4.0	.0	2.0	.0	11.5	.5
11	---	---	3.0	2.0	---	---	1.0	.0	3.0	.0	8.5	.5
12	---	---	5.0	.5	---	---	3.0	1.0	3.0	.0	9.0	1.5
13	---	---	6.0	.5	.0	.0	6.5	2.0	6.0	.5	10.0	.0
14	---	---	6.5	.5	.5	.0	4.0	2.5	6.0	3.0	11.5	1.0
15	---	---	6.5	.0	2.0	.0	6.0	3.0	6.0	3.5	11.0	2.0
16	12.5	6.5	---	---	3.0	.0	5.5	2.5	7.0	3.0	8.5	.0
17	10.5	3.5	---	---	---	---	6.5	2.0	6.5	3.0	7.5	.0
18	12.0	6.0	---	---	---	---	5.5	2.5	6.0	1.0	11.5	.0
19	12.5	8.0	---	---	---	---	3.0	1.0	4.0	1.5	13.0	2.0
20	9.0	4.0	---	---	---	---	5.0	.0	---	---	13.0	1.0
21	7.5	4.0	---	---	---	---	---	---	---	---	13.5	2.0
22	8.5	1.5	---	---	---	---	5.0	.0	---	---	7.0	3.0
23	10.0	2.5	2.0	.0	---	---	3.5	.0	---	---	10.5	3.0
24	10.5	3.0	2.0	.0	2.5	.0	4.5	.0	---	---	12.5	3.0
25	11.5	3.0	3.5	.5	4.0	1.0	5.5	.5	---	---	6.0	1.5
26	10.5	4.0	5.0	1.0	3.0	.0	3.5	.0	---	---	10.5	.5
27	10.5	3.0	3.0	1.0	2.5	1.5	3.0	.0	---	---	10.5	.0
28	8.5	2.0	2.5	.0	3.0	1.0	1.0	.0	---	---	7.0	1.5
29	5.0	2.0	---	---	2.5	.0	4.0	.0	---	---	11.0	2.0
30	6.0	1.0	---	---	2.0	.0	3.5	.0	---	---	7.0	1.0
31	---	---	---	---	1.5	.0	---	---	---	---	9.5	.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.0	.5	15.0	7.0	15.5	7.0	18.0	13.5	19.5	10.5	16.0	7.0
2	6.0	1.5	17.0	6.0	16.0	6.5	16.0	12.0	21.5	11.0	16.5	7.0
3	12.0	.5	16.0	5.5	17.0	8.0	19.5	11.0	19.0	10.0	17.0	8.0
4	15.0	2.5	19.5	6.0	17.0	7.5	19.0	10.0	19.5	9.0	17.0	8.0
5	14.0	3.0	---	---	17.0	6.5	18.0	9.5	20.5	9.5	16.5	7.5
6	10.0	3.0	---	---	17.0	7.0	18.0	9.5	21.0	9.5	16.5	9.5
7	10.0	1.5	---	---	17.5	7.5	15.5	10.0	21.0	10.0	15.0	11.0
8	14.5	.0	---	---	18.0	6.5	18.0	12.5	21.0	9.5	14.5	10.0
9	14.5	1.5	---	---	19.0	8.0	18.0	12.0	19.0	11.5	13.0	10.5
10	12.0	4.5	---	---	19.5	9.5	18.0	12.5	19.5	10.0	13.5	10.5
11	7.0	2.5	---	---	19.5	10.5	18.5	12.5	18.5	8.5	15.5	8.0
12	12.5	.0	---	---	19.5	9.5	---	---	18.0	8.5	14.0	8.5
13	15.0	.5	16.5	6.0	18.0	9.5	---	---	16.0	10.5	16.5	8.0
14	17.0	1.0	12.5	4.0	18.0	10.0	---	---	17.0	11.5	14.0	7.0
15	14.0	3.0	15.5	7.5	19.0	10.5	---	---	18.0	12.0	15.5	7.0
16	16.0	2.0	14.0	9.0	19.5	9.5	17.0	14.0	14.5	10.0	15.5	8.5
17	17.5	2.0	17.0	8.0	20.5	10.5	17.5	12.5	17.5	8.0	14.5	5.5
18	18.0	2.5	16.5	6.5	19.0	10.5	18.0	13.0	17.0	8.5	14.5	5.5
19	18.5	3.5	17.5	8.5	15.5	11.5	18.0	13.5	15.5	8.0	14.5	7.5
20	19.0	4.0	19.0	9.5	18.0	10.5	17.5	13.0	16.5	7.5	15.0	7.5
21	18.5	5.0	22.5	10.0	17.5	11.0	17.5	13.0	16.5	7.0	12.5	5.5
22	15.0	7.5	20.0	11.0	19.0	11.0	17.5	13.0	16.5	7.5	13.0	4.5
23	16.5	5.5	16.5	10.0	16.0	11.0	16.5	13.5	16.5	10.0	14.5	3.5
24	12.5	7.5	16.5	7.0	18.5	9.5	16.5	13.0	16.0	11.5	17.0	5.0
25	18.0	3.0	14.5	5.5	19.0	10.5	18.5	10.5	15.5	10.0	17.0	4.5
26	18.5	3.0	16.5	5.0	19.0	11.5	20.0	10.0	17.0	9.0	17.5	5.5
27	19.5	3.0	17.0	6.0	19.0	11.5	18.5	10.0	16.5	8.5	16.0	6.0
28	15.0	4.5	15.5	7.5	19.0	11.0	21.5	13.0	17.0	9.0	12.5	8.0
29	16.0	6.5	16.0	9.0	19.5	9.5	20.0	10.0	15.0	9.5	14.0	6.0
30	15.0	7.0	17.5	7.5	19.0	12.5	19.0	11.0	15.0	8.0	14.5	5.5
31	---	---	15.0	6.5	---	---	20.5	9.5	13.0	7.5	---	---

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---				---	8.2	8.2	7.6	7.8	8.3	8.2
2	---	---				---	8.2	8.2	7.6	7.8	8.3	8.2
3	---	---				---	8.2	8.2	7.6	7.8	8.3	8.1
4	---	---				---	8.3	8.2	7.6	7.7	8.3	8.1
5	---	---				8.4	8.3	---	7.5	7.7	8.3	8.1
6	---	---				8.5	8.3	---	7.6	7.7	8.3	8.1
7	---	---				8.5	8.2	---	7.6	7.7	8.3	8.1
8	---	---				8.6	8.2	---	7.6	7.7	8.3	8.1
9	---	---				8.6	8.3	---	7.6	7.8	8.3	8.1
10	---	8.4				8.6	8.3	---	7.7	7.8	8.3	8.1
11	---	8.2				8.7	8.4	---	7.9	7.8	8.3	8.1
12	---	8.2				8.7	8.4	---	7.8	---	8.3	8.1
13	---	8.3				8.6	8.4	8.1	7.8	---	8.3	8.0
14	---	8.3				8.5	8.4	8.0	7.9	---	8.3	8.1
15	---	8.3				8.5	8.5	7.9	7.9	---	8.3	8.0
16	---	---				8.4	8.5	7.9	7.8	7.8	8.3	8.1
17	---	---				8.2	8.3	7.9	7.8	7.7	8.3	8.2
18	8.1	---				8.3	8.4	7.8	7.8	7.9	8.3	8.2
19	8.0	---				8.3	8.3	7.7	7.8	7.9	8.3	8.3
20	8.0	---				8.3	8.3	7.7	7.8	7.9	8.3	8.3
21	8.0	---				8.3	8.3	7.6	7.8	7.9	8.3	8.3
22	8.0	---				8.3	8.3	7.6	7.8	8.0	8.3	8.3
23	8.0	8.5				8.3	8.3	7.6	7.8	8.1	8.3	8.3
24	8.2	8.4				8.3	8.3	7.7	7.8	8.2	8.3	8.3
25	8.3	8.3				8.3	8.3	7.7	7.8	8.3	8.3	8.4
26	8.3	8.2				8.2	8.3	7.7	7.8	8.3	8.2	8.4
27	8.3	8.3				8.2	8.3	7.7	7.8	8.3	8.2	8.4
28	8.3	8.3				8.3	8.3	7.6	7.8	8.3	8.2	8.5
29	8.4	---				8.3	8.2	7.6	7.8	8.3	8.2	8.5
30	8.3	---				8.2	8.3	7.6	7.8	8.3	8.2	8.5
31	---	---				8.2	---	7.7	---	8.3	8.2	---

BEST DOCUMENT AVAILABLE

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	11.2	10.8	12.1	11.3	---	---
5	---	---	---	---	---	---	11.5	10.8	12.7	11.3	10.8	10.0
6	---	---	---	---	---	---	11.5	11.2	11.9	10.9	11.3	10.5
7	---	---	---	---	---	---	11.4	11.1	11.9	11.1	11.3	9.6
8	---	---	---	---	---	---	11.4	10.8	12.4	11.3	11.2	9.7
9	---	---	---	---	---	---	11.2	10.5	12.4	11.2	11.5	9.9
10	---	---	10.2	8.8	---	---	11.2	10.2	12.2	11.0	11.4	9.2
11	---	---	10.2	9.0	---	---	11.2	10.7	12.0	10.9	11.3	9.6
12	---	---	10.4	9.0	---	---	10.9	10.3	12.0	11.5	11.4	9.8
13	---	---	10.4	9.4	---	---	10.6	9.5	11.8	10.8	11.5	9.9
14	---	---	10.7	9.3	---	---	10.4	10.0	11.6	10.7	11.5	9.5
15	---	---	10.6	9.3	---	---	10.4	9.8	11.6	10.8	11.1	9.6
16	---	---	---	---	---	---	10.7	10.1	11.5	10.5	11.5	10.1
17	---	---	---	---	---	---	10.7	9.8	11.5	10.5	11.5	10.4
18	---	---	---	---	---	---	10.5	9.8	11.6	10.1	11.7	9.5
19	---	---	---	---	---	---	10.8	10.3	11.5	11.3	11.4	9.3
20	---	---	---	---	11.2	10.5	10.7	9.6	---	---	11.7	9.5
21	---	---	---	---	---	---	---	---	---	---	11.4	9.4
22	---	---	---	---	---	---	10.4	9.6	---	---	11.1	10.0
23	---	---	10.1	9.7	---	---	10.5	9.6	---	---	11.2	9.6
24	9.9	8.2	10.0	9.4	---	---	10.3	9.2	---	---	11.3	9.3
25	10.1	8.1	10.1	9.3	---	---	---	---	---	---	11.2	10.3
26	9.9	8.2	9.9	9.1	---	---	---	---	---	---	11.4	9.6
27	10.2	8.3	9.9	9.2	---	---	---	---	---	---	11.1	9.4
28	10.3	8.5	10.1	9.5	---	---	---	---	---	---	11.3	10.2
29	10.2	8.8	---	---	---	---	---	---	---	---	11.2	9.4
30	10.4	9.1	---	---	---	---	11.8	11.3	---	---	11.4	9.9
31	---	---	---	---	---	---	---	---	---	---	11.2	9.7

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.3	9.0	9.8	8.1	8.7	7.0	7.9	5.9	---	---	10.3	8.1
2	11.2	10.1	9.9	7.8	7.8	6.7	---	---	---	---	9.6	7.6
3	9.8	8.8	10.0	8.0	7.6	6.7	---	---	---	---	8.9	7.9
4	10.8	8.3	---	---	7.8	6.6	---	---	---	---	10.3	8.0
5	10.6	8.2	---	---	8.6	6.5	---	---	---	---	11.1	8.6
6	10.7	9.0	---	---	8.8	6.3	---	---	---	---	10.7	8.3
7	11.0	9.3	---	---	8.7	6.4	---	---	---	---	10.1	8.3
8	11.2	8.5	---	---	8.9	6.0	---	---	---	---	10.2	8.3
9	11.1	8.4	---	---	8.7	5.5	---	---	---	---	9.8	8.5
10	10.5	8.8	---	---	7.0	5.7	---	---	---	---	9.8	8.2
11	10.9	9.6	---	---	7.0	6.1	---	---	---	---	9.9	8.0
12	11.1	8.9	---	---	8.0	7.2	---	---	---	---	9.7	8.1
13	11.1	8.2	9.8	6.5	8.1	7.0	---	---	---	---	9.4	7.7
14	10.8	7.5	9.8	6.8	8.0	7.4	---	---	---	---	9.3	7.6
15	10.5	8.0	7.6	6.7	8.2	7.4	---	---	---	---	11.1	8.0
16	10.6	7.9	8.3	7.2	8.1	7.0	---	---	---	---	11.7	8.4
17	10.6	8.4	8.9	7.4	8.0	7.0	---	---	---	---	9.4	7.0
18	11.1	8.3	9.0	7.1	8.0	7.0	---	---	---	---	9.9	7.2
19	11.0	8.0	8.3	6.8	8.0	7.3	---	---	---	---	10.1	7.5
20	10.9	7.9	8.3	6.8	7.8	6.9	---	---	---	---	9.9	7.5
21	10.6	7.9	8.0	6.5	7.8	7.1	---	---	---	---	10.4	7.9
22	10.2	8.1	8.0	6.8	7.7	7.0	---	---	12.4	10.0	10.7	8.3
23	10.2	8.1	7.8	7.0	7.8	7.0	---	---	12.2	10.0	10.8	8.1
24	9.8	8.5	8.3	7.4	8.0	7.5	---	---	11.9	10.1	10.5	7.8
25	10.3	7.7	8.7	7.6	7.8	6.9	---	---	11.9	10.2	10.8	8.3
26	10.2	7.6	8.6	7.5	7.8	6.8	---	---	12.1	9.5	10.7	7.9
27	10.2	7.5	8.5	7.1	7.8	6.7	---	---	11.8	9.5	10.3	7.8
28	10.1	7.4	8.3	7.2	8.0	6.6	---	---	11.3	9.2	9.5	8.5
29	---	---	8.3	7.2	8.0	6.7	---	---	11.2	9.2	10.2	8.2
30	9.6	8.0	8.4	7.3	8.0	6.1	---	---	10.9	9.0	10.2	8.1
31	---	---	8.7	7.4	---	---	---	---	10.7	8.9	---	---

BEST DOCUMENT AVAILABLE

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	2.2	35	.21	4.4	90	1.1	2.3	---	.50
2	5.2	70	.98	5.2	713	10	3.4	---	1.0
3	4.6	113	1.4	5.2	---	10	4.4	195	2.3
4	4.6	185	2.3	5.6	---	10	4.3	180	2.1
5	4.6	190	2.4	6.0	---	10	4.5	188	2.3
6	4.9	205	2.7	6.0	---	5.0	4.5	263	3.2
7	4.6	233	2.9	5.2	---	5.0	4.4	229	2.7
8	4.6	176	2.2	4.4	---	5.0	4.4	210	2.5
9	4.4	340	4.0	4.6	---	5.0	4.4	177	2.1
10	4.4	400	4.8	4.6	---	5.0	4.5	173	2.1
11	4.1	625	6.9	4.6	---	5.0	4.4	105	1.2
12	3.9	125	1.3	4.9	---	3.0	3.0	---	.50
13	3.9	---	1.0	4.6	---	2.0	2.5	---	.50
14	4.1	---	1.0	4.4	203	2.4	3.0	---	.50
15	3.9	---	1.0	4.4	101	1.2	4.0	---	1.0
16	3.7	---	1.0	4.4	278	3.3	3.7	---	1.0
17	3.9	---	1.0	4.3	330	3.8	3.6	---	1.0
18	4.1	---	1.0	4.6	203	2.5	3.6	---	1.0
19	4.1	105	1.2	4.6	128	1.6	3.6	---	1.0
20	4.4	105	1.2	4.6	158	2.0	3.3	582	5.2
21	4.4	68	.80	4.6	113	1.4	3.2	169	1.5
22	3.9	120	1.3	4.8	---	1.0	3.6	291	2.8
23	3.9	274	2.9	5.1	---	1.0	3.4	222	2.0
24	4.0	128	1.4	4.5	---	1.0	3.3	220	2.0
25	3.7	60	.60	4.6	---	1.0	3.3	275	2.5
26	3.9	60	.63	4.6	---	1.0	3.6	231	2.2
27	3.9	75	.79	4.9	---	1.0	3.4	253	2.3
28	4.4	101	1.2	4.4	75	.84	3.4	264	2.4
29	5.2	98	1.4	3.7	210	2.1	3.4	204	1.9
30	5.6	79	1.2	2.9	45	.35	3.4	192	1.8
31	4.4	---	1.0	---	---	---	3.4	204	1.9
TOTAL	131.5	---	53.71	140.7	---	103.59	113.2	---	57.00

BEST DOCUMENT AVAILABLE

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	3.4	286	2.6	3.3	---	2.0	4.3	276	3.2
2	3.4	240	2.2	3.3	---	1.9	4.2	288	3.3
3	3.4	224	2.1	3.3	---	1.9	4.3	---	3.0
4	3.3	196	1.7	3.2	203	1.8	4.4	---	2.0
5	3.0	231	1.9	3.2	250	2.2	4.4	168	2.0
6	2.7	196	1.4	3.2	230	2.0	4.4	324	3.8
7	3.3	182	1.6	3.3	190	1.7	4.3	288	3.3
8	3.0	154	1.2	3.0	160	1.3	4.3	264	3.1
9	3.0	224	1.8	3.1	---	1.0	4.2	228	2.6
10	3.0	301	2.4	3.1	---	1.0	4.3	252	2.9
11	3.1	154	1.3	3.1	---	2.0	4.4	228	2.7
12	3.2	322	2.8	3.1	250	2.1	4.4	156	1.9
13	3.6	336	3.3	3.0	---	2.0	4.4	288	3.4
14	3.9	322	3.4	3.1	---	2.0	4.4	300	3.6
15	3.7	252	2.5	3.2	---	2.0	4.5	276	3.4
16	3.6	254	2.5	3.3	---	2.0	4.6	228	2.8
17	3.3	224	2.0	3.3	---	2.0	4.2	324	3.7
18	3.3	231	2.1	4.0	---	4.0	4.4	408	4.8
19	3.2	231	2.0	6.0	480	7.8	4.3	396	4.6
20	3.3	132	1.2	5.3	444	6.4	4.3	294	3.4
21	3.2	120	1.0	4.7	---	4.0	4.3	---	3.2
22	3.2	230	2.0	4.5	---	4.0	4.4	---	3.0
23	3.1	---	2.0	4.4	---	4.0	4.3	---	2.9
24	3.0	---	2.0	4.4	---	4.0	4.3	---	2.7
25	3.3	---	2.0	4.4	270	3.2	4.3	216	2.5
26	3.3	---	2.1	4.4	180	2.1	4.1	216	2.4
27	3.3	---	2.1	4.5	276	3.4	4.1	312	3.5
28	3.3	---	2.1	4.5	262	3.2	4.1	288	3.2
29	3.3	---	2.1	4.4	288	3.4	4.2	264	3.0
30	3.3	231	2.1	---	---	---	4.2	216	2.4
31	3.3	---	2.0	---	---	---	4.1	242	2.7
TOTAL	101.3	---	63.5	109.6	---	80.4	133.4	---	95.0

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	4.1	187	2.1	3.0	260	2.1	1.4	49	.19
2	4.1	140	1.5	2.9	230	1.8	1.4	178	1.4
3	4.1	175	1.9	2.8	220	1.7	2.2	150	.89
4	4.1	175	1.9	1.2	130	.42	1.8	140	.68
5	4.1	190	2.1	.23	---	.50	1.1	88	.26
6	4.1	160	1.8	.25	---	.50	1.3	78	.27
7	4.0	120	1.3	.38	---	.50	1.4	133	.50
8	3.9	170	1.8	.27	---	.50	1.4	128	.48
9	3.9	170	1.8	.20	---	.50	1.4	204	1.1
10	3.9	240	2.5	.18	---	1.0	3.8	398	4.0
11	3.7	---	2.5	.22	---	1.0	3.9	461	4.9
12	3.4	---	2.5	.20	---	1.0	3.4	383	3.5
13	3.3	---	2.0	.18	---	1.0	4.2	455	5.1
14	3.4	---	2.0	1.1	---	2.0	4.1	435	4.8
15	3.4	---	2.0	2.9	320	2.1	4.0	379	4.1
16	3.7	---	2.0	2.3	340	2.1	3.2	240	2.1
17	3.7	160	1.6	1.9	220	1.1	4.0	345	3.7
18	3.9	210	2.2	2.4	250	1.6	4.5	455	5.5
19	3.6	175	1.7	3.4	300	2.8	4.1	705	7.8
20	2.8	130	.98	3.5	310	2.9	4.5	540	6.6
21	2.9	130	1.0	3.8	240	2.5	4.5	380	4.6
22	3.0	110	.89	4.2	330	3.7	4.4	315	3.7
23	2.9	85	.67	3.7	390	3.9	3.8	360	3.7
24	3.0	155	1.3	2.7	230	1.7	2.2	105	.62
25	3.0	180	1.5	3.1	200	1.7	3.8	315	3.2
26	3.2	220	1.9	3.0	190	1.5	4.1	289	3.2
27	3.3	190	1.7	3.2	280	2.4	4.0	175	1.9
28	3.3	190	1.7	3.7	250	2.5	3.6	135	1.3
29	3.0	230	1.9	4.0	270	2.9	2.1	53	.30
30	3.6	310	3.0	3.7	220	2.2	2.8	122	.92
31	---	---	---	1.6	155	.67	---	---	---
TOTAL	106.4	---	53.74	65.81	---	52.79	92.6	---	96.48

09306255 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	3.5	165	1.6	4.1	115	1.3	5.2	205	2.9
2	3.6	158	1.5	4.3	108	1.3	5.0	100	1.4
3	2.6	98	.69	4.3	81	.94	4.8	81	1.0
4	3.7	63	.63	4.4	95	1.1	4.8	65	.84
5	4.0	63	.67	4.5	---	.50	4.9	110	1.5
6	3.2	76	.65	4.5	---	.50	4.8	68	.88
7	3.5	83	.78	4.6	---	.50	4.8	65	.84
8	5.3	428	6.1	5.1	---	.50	4.9	95	1.3
9	5.5	278	4.1	5.6	---	.50	4.9	70	.93
10	5.5	225	3.3	5.8	---	.50	4.9	80	1.1
11	5.0	147	2.0	6.1	---	1.0	4.9	68	.90
12	4.8	158	2.0	6.3	---	1.0	4.9	70	.93
13	5.3	203	2.9	6.4	---	1.0	4.8	52	.67
14	6.3	540	9.2	6.4	---	1.0	4.7	40	.51
15	6.3	570	9.7	6.5	---	1.0	4.7	31	.39
16	6.3	525	8.9	6.4	---	1.0	4.7	35	.44
17	5.9	210	3.3	6.3	---	1.0	4.6	40	.50
18	5.8	300	4.7	6.3	75	1.3	4.6	55	.68
19	5.6	---	4.0	6.4	95	1.6	4.6	55	.68
20	5.1	---	4.0	6.2	80	1.3	4.5	55	.67
21	4.7	---	3.0	5.7	70	1.1	4.5	50	.61
22	4.5	225	2.7	5.6	75	1.1	4.4	65	.77
23	4.5	158	1.9	5.6	115	1.7	3.1	40	.33
24	6.2	540	9.0	5.8	80	1.3	1.2	28	.09
25	6.2	300	5.0	5.7	95	1.5	1.2	20	.06
26	5.7	---	4.0	5.7	92	1.4	1.3	50	.18
27	4.4	---	3.0	5.6	115	1.7	2.8	180	1.4
28	5.7	---	3.0	5.7	170	2.6	7.1	190	3.6
29	5.0	170	2.3	5.7	115	1.8	5.0	---	2.5
30	4.8	140	1.8	5.7	105	1.6	4.5	---	2.5
31	3.9	111	1.2	5.7	96	1.5	---	---	---
TOTAL	153.3	---	107.62	173.0	---	36.14	131.1	---	31.10
YEAR	1448.91		821.07						

BEST DOCUMENT AVAILABLE

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°51'02", long 108°15'30", in SW¼NE¼ sec.27, T.2 S., R.97 W., Rio Blanco County, Hydrologic unit 14050006, on left bank 20 ft (6 m) downstream from private bridge, 0.4 mi (0.6 km) upstream from Hunter Creek, and 18.7 mi (30.1 km) west of Rio Blanco.

DRAINAGE AREA.--309 mi² (800 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,214 ft (1,894 m), from topographic map.

REMARKS.--Records good. Diversions above station for irrigation above and below station.

AVERAGE DISCHARGE.--6 years, 17.6 ft³/s (0.498 m³/s), 12,750 acre-ft/yr (15.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 492 ft³/s (13.9 m³/s) Sept. 3, 1977, gage height, 4.19 ft (1.277 m); no flow Oct. 4, 5, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 3, 1977, exceeded all other floods at this location since at least 1939, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 125 ft³/s (3.54 m³/s) at 1400 May 13, gage height, 2.30 ft (0.701 m); maximum gage height, 2.75 ft (0.838 m) at 1700 Dec. 31 (ice jam); minimum daily discharge, 4.6 ft³/s (0.130 m³/s) Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	23	17	18	15	23	19	70	34	9.4	24	23
2	15	21	17	18	15	22	20	64	32	12	26	22
3	15	21	18	15	15	23	20	67	28	11	26	22
4	18	20	19	17	15	25	20	72	27	8.7	26	23
5	18	20	20	17	15	22	20	70	25	9.0	26	23
6	17	20	20	17	15	22	20	69	21	8.5	29	23
7	16	20	20	17	15	21	20	77	14	9.3	29	25
8	15	20	20	18	15	21	19	87	12	11	27	25
9	14	21	20	18	15	20	21	89	12	11	25	25
10	14	20	20	18	15	20	22	87	16	12	25	25
11	16	20	20	18	15	20	22	80	17	9.9	25	23
12	15	19	20	17	16	20	23	115	14	11	26	22
13	12	19	21	19	17	20	23	133	14	11	27	22
14	11	21	21	23	18	20	23	110	14	12	27	21
15	11	23	21	23	20	22	25	101	15	13	27	20
16	11	23	20	19	22	23	27	97	14	10	26	20
17	13	23	20	18	21	21	37	103	14	9.9	25	19
18	15	24	20	17	29	21	46	100	11	9.4	26	17
19	15	24	20	16	35	20	64	90	10	11	25	16
20	20	23	21	15	28	22	71	78	10	11	25	17
21	21	23	21	16	25	22	80	72	10	11	24	21
22	21	22	20	16	24	24	73	71	15	11	29	20
23	23	21	20	16	23	22	57	68	11	11	27	17
24	31	20	20	16	22	22	50	67	8.6	16	29	8.8
25	35	20	20	16	22	22	46	66	8.5	20	29	6.8
26	35	19	20	16	22	22	45	64	8.9	20	28	5.5
27	34	19	19	16	23	20	46	59	11	18	28	4.6
28	33	18	19	16	24	20	47	54	10	19	28	5.8
29	33	17	19	15	25	20	50	45	9.9	18	28	7.1
30	32	17	19	15	---	20	66	39	9.6	20	28	6.7
31	30	---	19	15	---	20	---	37	---	23	24	---
TOTAL	621	621	611	531	581	662	1122	2401	456.5	397.1	824	536.3
MEAN	20.0	20.7	19.7	17.1	20.0	21.4	37.4	77.5	15.2	12.8	26.6	17.9
MAX	35	24	21	23	35	25	80	133	34	23	29	25
MIN	11	17	17	15	15	20	19	37	8.5	8.5	24	4.6
AC-FT	1230	1230	1210	1050	1150	1310	2230	4760	905	788	1630	1060

CAL YR 1979 TOTAL 9842.7 MEAN 27.0 MAX 149 MIN 4.0 AC-FT 19520
WTR YR 1980 TOTAL 9363.9 MEAN 25.6 MAX 133 MIN 4.6 AC-FT 18570

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to current year.
WATER TEMPERATURE: October 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since April 1974. Water-quality monitor since October 1974.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum 1,980 micromhos Jan. 15, 1976; minimum, 550 micromhos Apr. 5, 1978.
WATER TEMPERATURES: Maximum, 26.5°C June 26, 1977; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 16.5 mg/L Mar. 21, 22, 1976; minimum, 3.1 mg/L Sept. 10, 1978.
pH: Maximum, 8.9 units Dec. 7, 1977; minimum, 7.4 units Apr. 18, 1979.
SEDIMENT CONCENTRATIONS: Maximum daily, 87,000 mg/L estimated Sept. 3, 1977, minimum daily, no flow Oct. 4, 5, 1977.
SEDIMENT LOADS: Maximum daily, 27,000 tons (24,500 t) estimated Sept. 3, 1977; minimum daily, no flow Oct. 4, 5, 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,830 micromhos Oct. 3; minimum, 664 micromhos Apr. 22.
WATER TEMPERATURES: Maximum, 22.0°C June 26, July 5; minimum, 0.0°C many days during November to March.
DISSOLVED OXYGEN: Maximum, 12.5 mg/L Oct. 7, minimum, 5.0 mg/L July 1.
pH: Maximum, 8.6 units Jan. 27, 30, Feb. 13, Sept. 29; minimum, 7.7 units June 10-16.
SEDIMENT CONCENTRATIONS: Maximum daily, 5,760 mg/L Apr. 21; minimum daily, 7 mg/L Oct. 20.
SEDIMENT LOADS: Maximum daily, 1,300 tons (1,180 t) Apr. 21; minimum daily, 0.38 ton (0.34 t) Oct. 20.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALKA-LINITY FIELD (MG/L AS CACO3)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
OCT											
25...	1400	27	1360	8.2	8.5	8.6	480	--	--	--	--
NOV											
01...	1215	24	1160	8.2	3.0	10.5	450	--	--	--	--
15...	1430	23	1250	8.4	6.0	10.2	430	--	--	--	--
DEC											
12...	1625	19	1280	8.3	.0	10.7	450	20	--	K8	560
JAN											
22...	1135	19	1280	8.5	1.5	10.9	450	--	--	--	--
FEB											
19...	1111	42	775	7.9	--	--	260	110	K2000	K30	> 8000
MAR											
17...	1215	21	1200	8.2	8.5	9.5	430	--	--	--	--
25...	0950	23	1180	8.1	4.0	10.0	410	--	--	--	--
APR											
29...	1035	56	850	8.4	8.5	9.3	290	--	--	--	--
MAY											
19...	1115	110	800	8.0	7.0	9.0	290	88	1200	1200	210
JUN											
12...	1010	15	1450	7.7	12.5	7.8	480	--	--	--	--
26...	1155	9.1	1460	8.1	17.0	9.5	490	--	--	--	--
JUL											
15...	1030	12	1440	8.0	15.5	8.7	520	--	--	--	--
AUG											
18...	1545	26	1280	8.1	19.0	7.4	450	13	K40	< 4	2500
SEP											
15...	1515	22	1270	8.0	17.5	8.1	430	16	100	K30	168
25...	1315	6.7	1480	8.1	11.5	9.1	480	--	--	--	--

K BASED ON NON-IDEAL COLONY COUNT.

BEST DOCUMENT AVAILABLE

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT										
24...	440	0	72	63	140	2.9	3.5	--	270	15
NOV										
01...	--	--	--	--	--	--	--	--	--	--
15...	450	18	79	61	130	2.7	3.0	--	260	11
DEC										
12...	470	21	82	64	140	2.8	2.5	.1	270	11
JAN										
22...	450	0	78	61	130	2.7	2.5	--	270	12
FEB										
19...	280	18	48	38	76	2.0	8.0	--	150	12
MAR										
19...	--	--	--	--	--	--	--	--	--	--
25...	400	0	70	54	120	2.6	2.3	--	250	10
APR										
24...	280	0	55	35	91	2.4	3.0	--	160	11
MAY										
14...	290	1	60	34	76	1.9	2.6	.5	130	8.6
JUN										
12...	470	0	75	69	170	3.4	4.4	--	300	12
26...	--	--	--	--	--	--	--	--	--	--
JUL										
16...	510	0	82	74	150	2.9	3.7	--	310	13
AUG										
18...	380	0	67	51	150	3.4	3.2	.1	260	11
SEP										
15...	400	0	66	57	160	3.5	3.2	.2	250	11
25...	--	--	--	--	--	--	--	--	--	--

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, DISSOLV (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
OCT										
24...	.7	--	16	870	1.1	63.4	.31	.000	1.0	.72
NOV										
01...	--	--	--	--	--	--	--	--	--	--
15...	.6	--	16	821	1.1	51.0	.37	.080	3.8	3.3
DEC										
12...	.8	.10	18	866	1.1	44.4	.89	.050	1.2	.22
JAN										
22...	.7	--	16	844	1.1	43.3	.59	.040	1.3	.66
FEB										
19...	.5	.10	16	510	.69	57.8	.77	.140	2.4	1.5
MAR										
19...	--	--	--	--	--	--	--	--	--	--
25...	.0	--	14	770	1.0	47.8	.65	.060	1.4	.71
APR										
24...	.5	--	13	547	.74	79.7	.82	.000	1.6	.78
MAY										
14...	.7	.10	13	510	.69	151	1.4	.010	2.2	.79
JUN										
12...	.2	--	19	940	1.2	38.1	.32	.030	1.5	1.2
26...	--	--	--	--	--	--	--	--	--	--
JUL										
16...	1.0	--	18	965	1.3	31.3	.09	.000	.73	.64
AUG										
18...	1.5	.40	17	837	1.1	58.8	.64	.000	.99	.35
SEP										
15...	1.4	.00	13	825	1.1	49.0	.57	.010	.93	.35
25...	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHENOLS (UG/L)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L)
OCT										
24...	.72	.190	3	200	20	90	13	.4	0	--
NOV										
01...	--	--	--	--	--	--	--	--	--	--
15...	3.4	.040	4	180	20	40	10	.3	2	--
DEC										
12...	.27	.110	2	170	10	30	16	.5	2	--
JAN										
22...	.70	.090	3	200	< 10	30	6.9	.5	1	--
FEB										
19...	1.6	1.10	3	170	150	50	22	11	12	.00
MAR										
19...	--	--	--	--	--	--	--	--	--	--
25...	.77	.130	2	150	20	20	20	--	0	--
APR										
24...	.78	1.60	3	140	50	5	17	8.4	3	--
MAY										
14...	.80	1.40	4	110	< 10	7	42	8.9	1	.00
JUN										
12...	1.2	.120	3	240	10	60	19	1.4	2	--
26...	--	--	--	--	--	--	--	--	--	--
JUL										
16...	.64	.050	3	250	20	50	20	.6	1	--
AUG										
18...	.35	.070	3	230	< 10	10	9.6	.6	0	--
SEP										
15...	.36	.040	3	200	< 10	10	5.1	.5	4	.00
25...	--	--	--	--	--	--	--	--	--	--

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)
DEC												
12...	10	90	< 1	0	0	0	9	.0	< 10	1	2300	< 3
FEB												
19...	20	200	0	0	1	0	0	.0	3	0	1300	0
MAY												
14...	10	90	< 1	0	4	0	20	.0	10	2	930	< 3
AUG												
18...	0	90	1	0	2	0	7	.0	18	1	2000	4
SEP												
15...	20	90	< 1	20	2	1	10	.0	< 10	1	2100	4

DATE	GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DISSOLVED (UG/L AS U)	URANIUM DISSOLVED, EXTRACTION (UG/L)	CYANIDE TOTAL (MG/L AS CN)
DEC												
12...	< 8.8	< 2.1	< 13	< 3.1	< 7.5	< 3.2	< 7.2	< 3.4	.07	--	3.1	.00
FEB												
19...	--	--	--	--	--	--	--	--	--	--	--	.00
MAY												
14...	< 4.3	50	< 6.3	73	5.4	66	5.1	61	.09	--	3.0	.00
AUG												
18...	< 8.2	3.0	< 12	4.4	< 5.7	3.3	< 5.6	3.0	.07	--	2.6	.00
SEP												
15...	< 6.8	1.6	< 10	2.4	< 6.0	1.2	< 5.7	1.2	.10	3.2	--	.01

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	PCB, TOTAL IN BOTTOM MATERIAL (UG/KG)	ALDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	CHLORDANE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDD, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDE, TOTAL IN BOTTOM MATERIAL (UG/KG)	DDT, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIAZINON, TOTAL IN BOTTOM MATERIAL (UG/KG)	DIELDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ENDRIN, TOTAL IN BOTTOM MATERIAL (UG/KG)	ETHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	HEPTACHLOR, TOTAL IN BOTTOM MATERIAL (UG/KG)
SEP												
15...	1515	0	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0

DATE	HEPTACHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOTTOM MATERIAL (UG/KG)	MALATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	METHOXYCHLOR, TOT. IN BOTTOM MATL. (UG/KG)	METHYL PARATHION, TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRITHION, TOT. IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	TOXAPHENE, TOTAL IN BOTTOM MATERIAL (UG/KG)	TRITHION, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4-D, TOTAL IN BOTTOM MATERIAL (UG/KG)	2,4,5-T TOTAL IN BOTTOM MATERIAL (UG/KG)	SILVEX, TOTAL IN BOTTOM MATERIAL (UG/KG)
SEP												
15...	.0	.0	.0	.0	.0	.0	.0	0	.0	0	0	0

DATE	TIME	SEDIMENT, SUSPENDED (MG/L)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM
MAY						
14...	1000	3850	17	25	46	--
29...	1154	1110	--	--	--	64

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1520	---	1310	---	1250	1240	1070	778	977	1400	1360	1220
2	1580	---	1260	---	1240	1260	1160	775	971	1370	1320	1230
3	1640	1260	1250	---	1240	1250	1190	756	994	1410	1290	1260
4	1610	1260	---	1280	1240	1230	1140	747	969	1410	1270	1250
5	1570	1260	1280	1280	1250	1240	1110	733	1120	1400	1230	1260
6	1570	1270	1280	1280	1240	1230	1080	722	1190	1400	1230	1260
7	1560	1270	1270	1290	1230	1220	1070	685	---	1390	1250	1240
8	1560	1270	---	1270	1270	1240	1090	---	---	1400	1270	1240
9	1560	1270	---	1240	1320	1250	1140	---	1350	1410	1270	1240
10	1550	1270	---	1240	1290	1250	1110	---	1370	1400	1270	1230
11	1510	1260	---	1280	1260	1250	1070	---	1410	1390	1270	1290
12	1500	1260	1360	1240	1260	1240	1070	---	1480	1440	1260	1260
13	1530	1260	1330	1220	1250	1250	1070	---	1470	1510	1240	1270
14	1560	1260	1310	1180	1240	1230	1060	848	1450	1470	1240	1280
15	1560	1260	1280	1210	1210	1210	1120	856	1430	1450	1250	1280
16	1550	1260	1280	1250	---	1190	1080	859	1430	1440	1270	1240
17	1560	1260	1290	1250	---	1250	1040	847	1430	1470	1240	1280
18	1550	---	1300	1250	---	1250	1010	868	1400	1570	1230	1290
19	1520	1230	1300	1260	885	1230	---	906	1430	1550	1250	1300
20	1510	1220	1290	1270	1050	1190	---	909	1430	1520	1250	1270
21	1510	1250	---	1270	1220	1100	---	---	1450	1500	1230	1260
22	1490	1270	---	1260	1240	1040	762	---	1440	1510	1260	1260
23	1490	1270	---	1280	1220	1040	792	---	1440	1500	1260	1280
24	1360	1250	---	1260	1240	1060	822	---	---	1510	1230	1430
25	1300	1250	---	1260	1280	1020	---	---	---	1500	1250	---
26	1290	1240	---	1250	1250	1030	847	---	1450	1460	1240	---
27	1290	1250	---	1260	1210	1040	861	---	1440	1460	1240	---
28	1290	1300	---	1220	1170	1020	851	---	1410	1450	1240	1270
29	1250	1330	---	1220	1200	1020	845	1020	1400	1440	1250	1270
30	1250	1330	---	1250	---	1000	784	990	1410	1440	1240	---
31	---	---	---	1310	---	994	---	981	---	1380	1210	---

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.5	8.0	---	---	.5	.0	---	---	2.5	.0	10.5	3.0
2	15.5	8.0	---	---	.5	.0	---	---	4.5	.0	6.5	1.0
3	15.0	7.5	6.5	1.5	2.0	.5	---	---	6.5	2.5	6.5	3.0
4	15.0	6.5	7.0	2.5	---	---	5.0	2.5	7.0	2.5	8.5	3.0
5	15.5	7.0	7.5	2.0	---	---	4.5	1.0	5.0	.0	9.0	2.5
6	15.5	7.0	7.5	2.0	5.0	.5	3.5	.5	5.0	1.5	5.0	3.0
7	15.5	7.5	7.0	4.5	5.5	1.5	3.5	.5	5.0	1.5	9.0	2.0
8	15.0	7.5	6.5	4.0	---	---	4.0	1.0	2.0	.0	9.0	2.0
9	14.0	7.0	6.5	3.5	---	---	4.0	.0	.5	.0	8.0	1.5
10	14.5	6.5	6.5	2.0	---	---	5.5	.5	.5	.0	11.0	1.5
11	14.5	7.0	5.5	2.5	---	---	1.0	.0	1.0	.0	8.0	1.0
12	14.0	7.0	5.5	.5	.5	.5	4.5	.0	3.5	.0	8.5	2.0
13	14.0	7.0	5.5	.5	1.0	.5	7.0	3.0	6.5	1.0	10.0	.0
14	11.5	8.0	5.5	.5	.5	.0	5.0	3.5	6.5	3.5	11.5	1.0
15	14.0	7.5	5.5	.5	1.0	.5	6.5	4.0	7.5	4.5	10.5	3.0
16	13.5	8.5	5.5	.5	2.0	.5	6.0	3.5	---	---	8.5	2.0
17	12.5	6.5	5.5	.5	3.0	.5	7.0	3.0	---	---	8.5	.5
18	13.5	8.5	---	---	3.5	.5	5.5	3.5	---	---	11.0	.0
19	13.0	9.5	3.5	.5	3.0	.5	3.0	1.0	---	---	12.5	3.0
20	10.0	5.5	4.0	.0	4.0	.5	4.5	.5	5.5	4.5	12.5	2.5
21	9.0	6.0	3.5	.0	---	---	4.0	.0	6.5	3.5	13.0	2.5
22	10.5	4.0	1.0	.0	---	---	4.5	.0	7.5	3.0	7.5	4.5
23	11.0	4.5	1.5	.0	---	---	3.0	.0	6.0	1.5	10.0	3.5
24	10.0	5.0	3.5	.5	---	---	5.0	.0	8.0	.5	12.0	3.5
25	11.0	4.0	4.0	1.5	---	---	5.5	1.0	7.5	.5	6.5	3.0
26	10.5	5.0	3.5	1.5	---	---	3.0	.0	8.5	3.0	11.5	1.5
27	10.0	4.0	1.5	.0	---	---	3.0	.0	10.0	1.0	11.0	.0
28	8.5	2.5	.0	.0	---	---	1.0	.0	9.0	1.5	8.0	3.0
29	6.0	3.0	.0	.0	---	---	5.0	.0	6.5	3.5	10.5	3.0
30	6.5	1.5	.0	.0	---	---	3.5	.0	---	---	8.0	2.5
31	---	---	---	---	---	---	.5	.0	---	---	9.5	2.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.0	2.5	11.0	7.5	12.5	7.0	20.0	11.5	18.0	12.0	17.5	7.0
2	7.0	3.0	12.5	6.5	16.0	6.5	18.5	12.0	20.5	11.5	18.5	8.0
3	12.0	2.0	11.5	6.5	17.5	7.5	21.0	11.0	18.5	10.5	19.0	8.5
4	15.0	4.0	12.0	7.0	18.5	7.5	21.5	10.0	19.5	9.5	19.5	8.5
5	13.5	4.5	12.5	7.5	18.5	8.0	21.5	9.5	20.0	9.5	19.0	8.5
6	10.0	4.5	11.5	7.5	18.5	8.0	22.0	9.5	20.5	10.5	18.0	10.5
7	9.0	3.0	9.5	8.0	---	---	17.5	10.5	21.0	10.5	16.0	11.5
8	13.5	.5	---	---	---	---	20.5	11.5	20.5	10.5	15.5	11.0
9	14.5	2.5	---	---	20.0	8.0	21.0	11.0	20.0	12.0	13.5	11.0
10	11.0	5.5	---	---	20.0	8.5	20.5	12.0	20.5	11.0	14.5	11.5
11	8.5	3.5	---	---	20.0	9.5	21.5	12.0	20.5	9.0	16.5	9.0
12	12.5	1.5	---	---	19.5	8.5	18.0	11.5	18.5	9.5	15.5	9.5
13	14.0	1.5	---	---	19.5	8.0	18.5	12.5	17.5	11.0	18.5	9.0
14	16.0	2.5	10.5	7.5	18.5	8.0	21.0	11.5	18.5	11.5	16.5	8.0
15	13.5	4.0	11.5	6.0	18.5	8.5	21.0	11.0	19.5	13.0	17.5	7.5
16	15.0	3.5	10.5	6.5	20.0	8.0	21.5	13.0	16.0	10.5	18.0	10.0
17	15.0	3.5	10.5	6.5	20.0	9.0	22.0	11.0	18.5	9.0	17.5	7.0
18	13.5	3.5	13.5	5.5	20.5	9.0	21.0	11.0	19.5	9.5	17.5	7.5
19	---	---	15.0	7.0	20.5	10.0	20.5	12.0	17.5	9.0	17.0	9.0
20	---	---	13.5	7.5	18.5	9.0	21.0	11.0	19.0	8.5	17.5	9.5
21	---	---	---	---	20.0	9.0	21.0	10.5	19.0	8.0	14.5	7.0
22	11.0	9.0	---	---	20.5	9.0	20.0	10.5	18.5	8.5	15.0	5.5
23	11.5	6.5	---	---	18.5	9.0	19.0	11.5	18.0	11.0	15.0	5.0
24	10.5	8.0	---	---	---	---	18.5	11.5	17.5	12.0	14.0	5.5
25	---	---	---	---	---	---	18.5	11.0	16.5	11.0	---	---
26	13.5	7.0	---	---	22.0	9.5	19.5	11.0	19.5	9.5	---	---
27	14.0	5.0	---	---	21.5	10.0	20.5	11.0	19.0	9.5	---	---
28	12.0	6.0	---	---	21.5	8.5	20.5	11.5	19.5	10.0	15.0	7.0
29	12.5	7.0	13.0	9.5	21.0	9.0	18.5	11.0	16.5	10.0	13.0	6.5
30	10.5	7.0	15.5	7.0	21.0	11.5	18.5	12.0	16.0	8.5	---	---
31	---	---	14.5	6.5	---	---	20.5	11.0	13.5	8.0	---	---

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	---	8.1	---	8.5	8.0	8.1	8.3	7.9	7.9	8.0	8.2
2	8.2	---	8.2	---	8.5	8.0	8.1	8.3	7.9	7.9	8.0	8.2
3	8.2	8.3	8.3	---	8.5	8.3	8.1	8.3	7.9	7.9	8.0	8.3
4	8.2	8.3	---	8.3	8.5	8.3	8.1	8.3	7.9	7.9	8.1	8.3
5	8.2	8.3	8.4	8.3	8.5	8.3	8.1	8.3	7.9	7.9	8.1	8.3
6	8.2	8.3	8.4	8.3	8.5	8.3	8.1	8.3	7.8	8.0	8.2	8.3
7	8.2	8.2	8.4	8.3	8.5	8.3	8.2	8.3	---	8.0	8.1	8.3
8	8.2	8.2	---	8.3	8.5	8.3	8.2	---	---	7.9	8.1	8.3
9	8.2	8.2	---	8.3	8.4	8.4	8.2	---	7.8	7.9	8.1	8.3
10	8.2	8.2	---	8.3	8.4	8.4	8.2	---	7.7	7.9	8.1	8.3
11	8.2	8.2	---	8.3	8.4	8.4	8.2	---	7.7	8.0	8.1	8.3
12	8.2	8.2	8.3	8.2	8.5	8.4	8.3	---	7.7	7.9	8.1	8.3
13	8.2	8.2	8.2	8.2	8.5	8.4	8.3	---	7.7	7.9	8.1	8.3
14	8.2	8.2	8.2	8.2	8.5	8.4	8.3	8.1	7.8	8.0	8.1	8.4
15	8.1	8.2	8.3	8.4	8.5	8.4	8.3	8.1	7.8	7.9	8.2	8.4
16	8.1	8.2	8.3	8.4	---	8.4	8.3	8.1	7.7	8.0	8.1	8.4
17	8.1	8.2	8.3	8.5	---	8.3	8.4	8.1	7.9	8.0	8.1	8.4
18	8.1	---	8.4	8.5	---	8.3	8.3	8.1	8.0	7.9	8.1	8.4
19	8.1	8.2	8.4	8.5	8.4	8.3	---	8.1	7.9	7.9	8.1	8.4
20	8.2	8.2	8.4	8.5	8.4	8.3	---	8.0	7.9	7.9	8.1	8.4
21	8.2	8.2	---	8.5	8.2	8.3	---	---	8.0	7.9	8.2	8.4
22	8.2	8.2	---	8.5	8.3	8.2	8.2	---	8.0	7.9	8.2	8.4
23	8.2	8.2	---	8.5	8.3	8.2	8.2	---	7.9	7.9	8.2	8.4
24	8.2	8.2	---	8.5	8.3	8.1	8.3	---	---	7.9	8.2	8.3
25	8.3	8.2	---	8.5	8.3	8.1	---	---	---	7.9	8.2	---
26	8.3	8.2	---	8.5	8.3	8.1	8.3	---	8.0	7.9	8.2	---
27	8.3	8.2	---	8.5	8.3	8.1	8.4	---	7.9	7.9	8.2	---
28	8.3	8.2	---	8.5	8.3	8.1	8.3	---	7.9	8.0	8.2	8.4
29	8.3	8.2	---	8.5	8.3	8.1	8.3	7.9	8.0	7.9	8.2	8.5
30	8.3	8.1	---	8.5	---	8.1	8.3	7.9	8.0	7.9	8.2	---
31	---	---	---	8.4	---	8.1	---	7.9	---	7.9	8.2	---

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	11.8	7.3	---	---	10.9	10.6	---	---	11.2	10.5	11.0	9.3
2	12.1	7.1	---	---	10.8	10.6	---	---	11.2	10.2	11.4	10.1
3	11.9	7.2	10.6	9.2	10.9	10.5	---	---	10.7	9.6	10.7	9.8
4	12.0	7.2	10.7	9.0	---	---	11.0	9.7	10.5	9.7	10.7	9.6
5	12.1	7.2	10.9	9.1	---	---	11.5	10.5	11.2	10.1	11.0	9.7
6	12.2	7.0	11.1	9.0	10.9	9.7	11.5	10.9	10.9	9.9	10.9	10.1
7	12.5	7.0	10.2	9.0	10.7	9.5	11.5	10.7	10.7	10.0	10.9	9.4
8	12.1	7.1	10.3	9.0	---	---	11.2	10.9	11.2	10.4	11.0	9.4
9	12.2	7.2	10.3	8.9	---	---	---	---	11.3	10.7	11.1	9.5
10	12.1	7.3	11.0	9.0	---	---	---	---	11.2	10.7	11.0	8.7
11	11.7	7.2	10.9	9.5	---	---	---	---	11.1	10.6	10.7	9.2
12	12.2	7.2	11.4	9.5	11.0	10.6	---	---	11.1	10.2	10.6	9.4
13	12.1	7.0	11.4	8.9	11.0	10.7	11.0	9.6	10.8	9.6	11.0	8.9
14	11.6	7.0	10.8	8.8	11.1	10.8	10.6	9.8	10.0	8.8	10.8	8.3
15	12.0	6.7	10.8	8.8	11.2	11.0	10.9	10.0	9.5	8.7	10.3	8.5
16	11.7	6.6	10.6	8.6	11.3	10.9	10.8	10.2	---	---	10.4	8.9
17	11.2	6.6	10.5	8.5	11.4	10.7	11.0	9.9	---	---	10.7	9.3
18	11.0	6.6	---	---	11.4	10.7	10.8	10.0	---	---	11.2	8.7
19	11.3	6.5	10.2	9.1	11.3	10.7	11.6	10.7	8.3	7.6	10.6	8.5
20	8.4	6.5	10.5	9.1	11.2	10.4	12.0	10.9	9.8	8.1	10.8	8.4
21	9.8	7.9	10.9	9.4	---	---	11.8	10.9	10.3	9.5	10.5	8.2
22	10.1	7.9	10.7	9.4	---	---	11.9	10.3	10.5	9.6	10.1	9.4
23	9.8	7.6	10.5	9.8	---	---	11.2	10.4	11.0	9.9	10.6	8.8
24	9.4	7.9	10.6	9.3	---	---	11.2	10.0	11.4	9.7	10.5	8.4
25	9.8	8.1	10.2	9.3	---	---	10.7	9.8	11.5	9.5	10.7	9.3
26	9.7	8.3	10.1	9.4	---	---	11.0	10.0	11.5	9.7	11.4	8.9
27	10.2	8.5	10.9	9.9	---	---	10.9	10.2	11.5	9.3	11.3	8.9
28	10.3	8.6	10.8	10.4	---	---	11.0	10.6	11.3	9.3	11.0	9.6
29	10.3	8.9	10.8	10.2	---	---	10.9	9.6	10.6	9.9	11.0	9.1
30	10.5	9.3	10.7	10.3	---	---	11.0	10.3	---	---	10.5	9.3
31	---	---	---	---	---	---	11.3	10.5	---	---	11.0	8.8

DAY	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	10.6	8.0	10.6	9.7	9.8	8.6	10.5	5.0	9.0	7.7	---	---
2	10.8	9.2	11.0	9.5	9.5	7.5	---	---	8.8	7.7	---	---
3	10.8	8.9	11.1	9.7	8.8	6.8	---	---	9.1	8.0	---	---
4	10.9	8.0	10.9	9.6	8.3	6.5	---	---	9.4	8.0	---	---
5	10.3	8.0	10.8	9.5	8.6	6.4	---	---	9.3	8.0	---	---
6	10.3	8.7	10.7	9.4	8.8	6.5	---	---	9.5	8.1	---	---
7	10.7	9.0	10.1	9.2	---	---	---	---	9.4	7.9	---	---
8	11.1	7.8	---	---	---	---	---	---	9.3	7.9	---	---
9	10.5	7.5	---	---	9.0	7.7	---	---	9.1	7.9	---	---
10	9.7	8.4	---	---	8.4	6.7	---	---	9.1	8.0	---	---
11	10.1	8.7	---	---	8.0	6.6	---	---	9.2	7.9	---	---
12	10.6	8.1	---	---	7.7	6.4	---	---	9.1	8.0	---	---
13	10.7	7.6	---	---	7.9	6.4	---	---	8.9	8.2	---	---
14	10.3	7.1	---	---	8.0	6.7	---	---	8.8	7.9	---	---
15	9.8	7.6	---	---	7.8	6.6	---	---	8.6	8.0	7.9	7.5
16	9.8	7.3	---	---	8.1	6.6	11.1	6.6	8.7	8.2	8.7	7.1
17	9.9	7.8	---	---	8.1	6.9	10.1	6.5	8.9	8.0	9.2	7.1
18	10.3	7.8	---	---	8.5	6.6	10.0	7.0	8.8	8.0	9.1	7.1
19	---	---	---	---	8.4	7.0	10.2	6.5	8.8	8.1	8.9	7.1
20	---	---	---	---	8.4	6.6	9.9	6.6	8.9	8.0	9.0	7.2
21	---	---	---	---	9.0	6.5	9.6	7.1	8.9	7.4	9.4	7.7
22	9.1	8.6	---	---	9.5	6.0	10.7	6.4	9.1	7.3	9.8	7.6
23	9.9	8.4	---	---	10.1	6.3	10.2	6.5	8.6	7.3	9.9	7.6
24	9.4	8.5	---	---	---	---	9.5	6.7	8.4	7.2	9.6	8.2
25	---	---	---	---	---	---	8.5	7.1	8.4	7.2	---	---
26	10.3	8.4	---	---	11.4	5.3	8.7	7.1	8.5	6.7	---	---
27	10.6	8.5	---	---	10.1	5.3	9.4	7.1	8.3	6.6	---	---
28	10.6	9.1	---	---	10.6	5.5	9.1	7.3	---	---	9.5	8.2
29	10.3	9.2	10.2	8.8	10.5	5.3	9.3	7.4	---	---	9.9	8.1
30	10.3	9.7	10.7	8.7	10.8	5.1	9.4	7.6	---	---	---	---
31	---	---	10.3	8.5	---	---	8.9	7.5	---	---	---	---

BEST DOCUMENT AVAILABLE

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	12	70	2.3	23	---	10	17	---	7.0
2	15	122	4.9	21	205	12	17	---	7.0
3	15	136	5.5	21	163	9.2	18	---	7.0
4	18	45	2.2	20	168	9.1	19	---	7.0
5	18	70	3.4	20	131	7.1	20	165	8.9
6	17	---	3.0	20	103	5.6	20	183	9.9
7	16	---	3.0	20	170	9.2	20	156	8.4
8	15	---	3.0	20	193	10	20	157	8.5
9	14	---	3.0	21	234	13	20	171	9.2
10	14	85	3.2	20	221	12	20	162	8.7
11	16	31	1.3	20	---	10	20	179	9.7
12	15	28	1.1	19	---	7.0	20	---	10
13	12	29	.94	19	120	6.2	21	---	10
14	11	30	.89	21	110	6.2	21	203	12
15	11	58	1.7	23	90	5.6	21	147	8.3
16	11	54	1.6	23	171	11	20	141	7.6
17	13	16	.56	23	136	8.4	20	163	8.8
18	15	16	.65	24	163	11	20	94	5.1
19	15	34	1.4	24	160	10	20	94	5.1
20	20	7	.38	23	110	6.8	21	89	5.0
21	21	20	1.1	23	115	7.1	21	146	8.3
22	21	19	1.1	22	---	7.0	20	108	5.8
23	23	24	1.5	21	---	7.0	20	134	7.2
24	31	794	66	20	---	7.0	20	159	8.6
25	35	---	100	20	---	7.0	20	119	6.4
26	35	---	100	19	---	7.0	20	137	7.4
27	34	---	80	19	---	7.0	19	106	5.4
28	33	---	80	18	142	6.9	19	110	5.6
29	33	---	60	17	160	7.3	19	110	5.6
30	32	---	40	17	---	7.0	19	286	15
31	30	---	20	---	---	---	19	111	5.7
TOTAL	621	---	593.72	621	---	249.7	611	---	244.2

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	18	146	7.1	15	266	11	23	214	13
2	18	114	5.5	15	203	8.2	22	197	12
3	18	102	5.0	15	157	6.4	23	294	18
4	17	75	3.4	15	137	5.5	25	245	17
5	17	99	4.5	15	134	5.4	22	236	14
6	17	87	4.0	15	284	12	22	310	18
7	17	110	5.0	15	319	13	21	281	16
8	18	110	5.3	15	---	10	21	304	17
9	18	156	7.6	15	---	10	20	271	15
10	18	101	4.9	15	---	20	20	242	13
11	18	---	5.0	15	---	20	20	250	13
12	17	---	7.0	16	600	26	20	353	19
13	19	---	10	17	289	13	20	318	17
14	23	237	15	18	188	9.1	20	290	16
15	20	149	8.0	20	201	11	22	316	19
16	19	103	5.3	22	228	14	23	256	16
17	18	126	6.1	21	216	12	21	241	14
18	17	157	7.2	29	702	70	21	296	17
19	16	128	5.5	35	741	76	20	309	17
20	15	137	5.5	28	362	27	22	264	16
21	16	223	9.6	25	309	21	22	---	10
22	16	187	8.1	24	235	15	24	---	10
23	16	257	11	23	212	13	22	---	10
24	16	277	12	22	---	10	22	---	10
25	16	186	8.0	22	---	10	22	---	10
26	16	244	11	22	205	12	22	---	10
27	16	368	16	23	259	16	20	272	15
28	16	195	8.4	24	260	17	20	265	14
29	15	199	8.1	25	218	15	20	246	13
30	15	134	5.4	---	---	---	20	208	11
31	15	288	12	---	---	---	20	238	13
TOTAL	531	---	236.5	581	---	508.6	662	---	443

BEST DOCUMENT AVAILABLE

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	19	195	10	70	---	380	34	758	70
2	20	177	9.6	64	---	340	32	664	57
3	20	183	9.9	67	---	350	28	527	40
4	20	228	12	72	---	380	27	447	33
5	20	280	15	70	---	320	25	383	26
6	20	221	12	69	1480	276	21	328	19
7	20	251	14	77	2700	561	14	216	8.2
8	19	264	14	87	3580	841	12	131	4.2
9	21	340	19	89	---	890	12	162	5.2
10	22	362	22	87	---	770	16	246	11
11	22	334	20	80	---	640	17	191	8.8
12	23	335	21	115	---	990	14	211	8.0
13	23	322	20	133	3300	1170	14	327	12
14	23	357	22	110	2920	867	14	172	6.5
15	25	443	30	101	2600	709	15	160	6.5
16	27	690	50	97	2530	663	14	133	5.0
17	37	1240	127	103	2620	729	14	227	8.6
18	46	2570	330	100	2550	688	11	207	6.1
19	64	5000	890	90	2230	542	10	274	7.4
20	71	5480	1090	78	2490	524	10	224	6.0
21	80	5760	1300	72	2080	404	10	178	4.8
22	73	4880	1070	71	2160	414	15	217	8.8
23	57	2790	438	68	2000	367	11	128	3.8
24	50	2120	286	67	1950	353	8.6	83	1.9
25	46	1480	184	66	1710	305	8.5	131	3.0
26	45	1540	187	64	1550	268	8.9	64	1.5
27	46	1570	195	59	1490	237	11	---	6.0
28	47	1590	202	54	1530	223	10	---	5.0
29	50	1640	221	45	1210	147	9.9	---	4.0
30	66	2690	479	39	1060	112	9.6	---	3.0
31	---	---	---	37	893	89	---	---	---
TOTAL	1122	---	7299.5	2401	---	15549	456.5	---	390.3

BEST DOCUMENT AVAILABLE

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	9.4	125	3.2	24	---	25	23	111	6.9
2	12	188	6.1	26	---	30	22	94	5.6
3	11	143	4.2	26	---	30	22	121	7.2
4	8.7	97	2.3	26	---	30	23	143	8.9
5	9.0	98	2.4	26	---	30	23	162	10
6	8.5	96	2.2	29	550	43	23	133	8.3
7	9.3	---	2.0	29	435	34	25	178	12
8	11	89	2.6	27	402	29	25	162	11
9	11	---	2.0	25	405	27	25	159	11
10	12	---	3.0	25	405	27	25	124	8.4
11	9.9	---	2.0	25	380	26	23	101	6.3
12	11	---	2.0	26	351	25	22	55	3.3
13	11	---	2.0	27	322	23	22	118	7.0
14	12	---	2.0	27	400	29	21	79	4.5
15	13	---	3.0	27	511	37	20	116	6.3
16	10	110	3.0	26	534	37	20	135	7.3
17	9.9	195	5.2	25	473	32	19	98	5.0
18	9.4	267	6.8	26	516	36	17	93	4.3
19	11	177	5.3	25	327	22	16	100	4.3
20	11	225	6.7	25	---	20	17	108	5.0
21	11	235	7.0	24	229	15	21	142	8.1
22	11	276	8.2	29	201	16	20	151	8.2
23	11	193	5.7	27	164	12	17	161	7.4
24	16	---	5.0	29	197	15	8.8	122	2.9
25	20	---	10	29	184	14	6.8	68	1.2
26	20	---	10	28	140	11	5.5	88	1.3
27	18	---	15	28	131	9.9	4.6	85	1.1
28	19	---	15	28	182	14	5.8	132	2.1
29	18	---	15	28	140	11	7.1	59	1.1
30	20	---	20	28	114	8.6	6.7	99	1.8
31	23	---	20	24	153	9.9	---	---	---
TOTAL	397.1	---	198.9	824	---	728.4	536.3	---	177.8
YEAR	9363.9		26619.62						

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO

LOCATION.--Lat 39°52'16", long 108°17'18", in SE¼SW¼ sec.15, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 600 ft (183 m) upstream from mouth, 0.2 mi (0.3 km) west of Buck School, and 23.7 mi (38.1 km) northwest of Rio Blanco.

DRAINAGE AREA.--103 mi² (267 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,130 ft (1,868 m), from topographic map.

REMARKS.--Records good. Diversions for irrigation of about 160 acres (647,000 m²) above station.

AVERAGE DISCHARGE.--5 years, 6.86 ft³/s (0.194 m³/s), 4,970 acre-ft/yr (6.13 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 72 ft³/s (2.04 m³/s) May 14, 1980, gage height, 2.86 ft (0.872 m); minimum daily, 0.20 ft³/s (0.006 m³/s) May 12, 13, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 72 ft³/s (2.04 m³/s) at 2145 May 14, gage height, 2.86 ft (0.872 m); minimum daily, 1.6 ft³/s (0.045 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	6.9	3.4	5.4	5.9	7.2	5.8	8.9	34	9.0	11	2.4
2	1.8	7.3	3.6	5.3	5.8	7.2	5.8	14	32	12	10	2.5
3	1.8	7.3	3.6	5.3	5.8	7.2	5.6	17	27	11	9.5	2.7
4	1.8	7.3	6.2	5.7	4.9	7.2	5.2	16	26	10	9.6	2.8
5	1.9	7.3	6.5	5.6	4.9	7.2	5.0	17	25	12	10	3.2
6	1.9	8.1	6.5	4.9	5.3	7.2	4.7	19	23	11	8.8	2.9
7	2.1	8.1	6.1	4.9	5.6	7.2	4.8	20	23	11	7.1	2.7
8	2.1	8.1	6.1	5.2	4.6	7.2	4.4	25	23	13	7.1	2.9
9	2.1	7.7	5.7	5.6	4.6	6.4	4.4	28	23	10	6.9	2.9
10	2.1	7.6	5.7	6.3	5.6	6.4	4.7	31	23	9.5	5.0	3.1
11	2.2	8.0	5.7	5.5	5.4	6.8	4.8	33	22	8.1	3.1	3.1
12	2.2	7.6	4.5	7.4	6.0	6.8	5.3	38	21	8.7	2.0	3.0
13	2.2	7.2	4.7	11	6.4	6.4	5.4	42	20	9.4	1.8	3.2
14	2.4	7.2	4.9	12	6.8	6.0	5.8	43	20	8.5	1.7	3.3
15	2.5	6.8	5.3	11	7.6	6.0	5.7	46	20	7.7	2.2	3.3
16	2.5	6.4	6.0	9.7	8.5	6.4	5.8	40	20	7.5	2.6	3.7
17	2.9	6.4	6.0	8.2	9.0	5.6	5.5	41	20	7.4	2.7	3.6
18	2.9	6.7	6.0	7.3	20	6.1	5.0	42	19	7.2	2.8	5.3
19	2.9	6.7	5.3	6.5	31	6.4	4.4	47	17	6.5	2.8	9.3
20	3.5	6.3	6.0	5.7	15	6.7	4.2	45	16	7.7	3.0	11
21	4.4	5.9	6.4	4.9	9.0	6.2	4.3	42	16	8.2	2.6	9.9
22	8.5	5.3	5.9	4.9	9.0	6.9	5.8	45	16	8.9	1.8	9.1
23	11	5.7	5.9	4.9	7.2	6.8	7.2	51	16	10	1.7	7.4
24	9.9	5.9	5.5	4.9	9.4	6.5	7.7	46	16	11	2.2	7.2
25	8.8	5.9	6.2	5.3	9.4	6.7	7.1	45	16	12	2.1	6.1
26	8.3	5.9	5.5	4.9	7.2	6.6	6.4	44	15	12	2.2	6.2
27	7.8	5.4	5.4	4.4	9.1	5.9	4.8	36	13	9.8	2.4	8.5
28	7.8	4.6	5.4	5.3	9.0	6.0	4.8	36	10	8.8	2.3	8.0
29	8.8	4.1	5.4	5.3	8.0	5.6	6.5	35	9.3	8.3	2.4	7.7
30	8.2	3.2	5.4	5.5	---	5.7	8.5	35	9.9	8.5	2.3	6.6
31	7.1	---	5.4	5.1	---	5.5	---	34	---	8.5	2.4	---
TOTAL	136.0	196.8	170.2	193.9	245.5	202.0	165.4	1064.9	591.2	293.2	134.1	153.6
MEAN	4.39	6.56	5.49	6.25	8.47	6.52	5.51	34.4	19.7	9.46	4.33	5.12
MAX	11	8.1	6.5	12	31	7.2	8.5	51	34	13	11	11
MIN	1.6	3.2	3.4	4.4	4.6	5.5	4.2	8.9	9.3	6.5	1.7	2.4
AC-FT	270	390	338	385	487	401	328	2110	1170	582	266	305

CAL YR 1979 TOTAL 3282.1 MEAN 8.99 MAX 50 MIN 1.3 AC-FT 6510
WTR YR 1980 TOTAL 3546.8 MEAN 9.69 MAX 51 MIN 1.6 AC-FT 7040

BEST DOCUMENT AVAILABLE

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1975 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1975 to current year.
WATER TEMPERATURE: April 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1975. Pumping sediment sampler since October 1975.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,920 micromhos Oct. 16, 1975; minimum, 551 micromhos Feb. 19, 1980.
WATER TEMPERATURES: Maximum, 24.0°C July 30, 1976; minimum, 0.0°C many days during winter months some years.
SEDIMENT CONCENTRATIONS: Maximum daily, 19,800 mg/L Aug. 5, 1978; minimum daily, 7 mg/L estimated Oct. 1, 1979.
SEDIMENT LOADS: Maximum daily, 775 tons (703 t) May 14, 1980; minimum daily, 0.01 ton (0.01 t) May 12-14, 1976.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,990 micromhos Oct. 13, 14; minimum, 551 micromhos Feb. 19.
WATER TEMPERATURES: Maximum, 23.0°C July 28; minimum, 0.0°C many days during October, and December to March.
SEDIMENT CONCENTRATIONS: Maximum, 5,510 mg/L May 14; minimum, 7 mg/L estimated Oct. 1.
SEDIMENT LOADS: Maximum, 775 tons (703 t) May 14; minimum, 0.03 ton (0.03 t) estimated Oct. 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM AD-SORPTION RATIO
NOV												
13...	1010	6.8	1500	8.2	3.5	11.2	580	120	90	84	140	2.6
DEC												
18...	1320	7.5	1600	8.3	1.0	12.8	630	170	99	91	150	2.6
JAN												
22...	0945	5.6	1550	8.4	.5	10.6	600	140	95	88	140	2.5
FEB												
19...	1500	43	730	7.8	5.0	9.2	290	69	47	41	62	1.6
MAR												
25...	1418	7.2	1480	8.2	7.0	10.0	560	140	87	81	130	2.4
APR												
23...	1010	7.6	1250	8.4	8.5	9.2	490	120	82	69	110	2.2
MAY												
15...	1350	48	1050	7.9	12.0	8.3	400	64	75	52	70	1.5
JUN												
12...	0920	22	1260	7.9	9.5	9.0	510	93	87	71	100	1.9
JUL												
15...	1000	14	1630	8.1	11.5	7.4	660	170	100	100	160	2.7
AUG												
18...	1650	4.4	1690	8.0	19.5	8.4	620	180	90	94	160	2.8
SEP												
15...	1635	3.5	1690	7.5	14.5	8.5	660	160	97	100	170	2.9

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
NOV												
13...	2.5	460	410	8.3	.5	18	1040	1.4	19.1	.34	.020	.36
DEC												
18...	1.9	460	430	8.2	.4	20	1080	1.4	21.9	.38	.020	.40
JAN												
22...	2.1	460	430	[illegible]	.5	18	1070	1.4	16.2	.34	.020	.36
FEB												
19...	--	220	170		.2	15	--	.68	57.8	--	.020	--
MAR												
25...	2.0	420	410	9.8	.0	16	953	1.3	19.3	.18	.010	.19
APR												
23...	2.1	370	310	8.3	.5	18	829	1.1	17.0	.76	.020	.78
MAY												
15...	2.3	340	210	5.6	.4	17	645	.88	83.6	1.2	.010	1.2
JUN												
12...	2.1	420	310	8.6	.3	21	860	1.1	51.1	.62	.000	.62
JUL												
15...	2.5	490	470	9.3	.7	14	1150	1.5	43.5	.29	.010	.30
AUG												
18...	2.5	440	530	10	.5	20	1180	1.6	14.0	.18	.000	.18
SEP												
15...	3.4	500	500	10	.7	19	1210	1.6	11.4	.17	.010	.18

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)
NOV 13...	.34	.050	.38	.43	.79	.060	.010	.010	2	60	130	2
DEC 18...	.35	.030	.88	.91	1.3	.220	.050	.010	4	70	130	<1
JAN 22...	.36	.020	1.6	1.60	2.0	.130	.030	.010	2	50	130	<1
FEB 19...	.22	1.40	16	17.0	--	3.90	.660	.360	3	200	200	0
MAR 25...	.14	.020	.85	.87	1.1	.050	.020	.030	1	50	120	<1
APR 23...	.81	.040	2.3	2.30	3.1	.640	.030	.000	2	70	100	<1
MAY 15...	1.3	.060	1.8	1.90	3.1	.770	.030	.010	3	80	110	<1
JUN 12...	.63	.060	1.5	1.60	2.2	.180	.090	.080	3	100	110	<1
JUL 16...	.25	.040	.32	.36	.66	.040	.020	.000	2	100	180	0
AUG 18...	.17	.000	.65	.65	.83	.020	.000	.010	3	80	190	2
SEP 15...	.16	.000	.39	.39	.57	.020	.010	.000	2	60	160	<1

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	PHENOLS (UG/L)
NOV 13...	0	20	0	20	50	.0	1	4300	5	.10	--
DEC 18...	0	10	0	20	50	.0	1	4800	<3	.00	3
JAN 22...	0	<10	0	<4	50	.0	1	4600	<3	.00	--
FEB 19...	2	610	0	0	210	.0	0	2000	70	.00	26
MAR 25...	0	<10	0	20	40	.0	1	4100	<3	.00	--
APR 23...	4	50	4	10	20	.0	1	3100	<3	.20	--
MAY 15...	2	<10	0	10	20	.0	2	2100	<3	.00	3
JUN 12...	3	100	3	7	70	.0	2	3200	9	.00	--
JUL 16...	4	40	0	20	60	.0	1	420	20	.00	--
AUG 18...	3	120	0	10	30	.0	1	5000	9	.10	--
SEP 15...	3	20	0	20	50	.0	1	5300	7	.00	--

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
FEB 19...	1500	0	9	1600	0	1	130	33	50	57000
MAY 15...	1350	20	7	400	0	0	30	9	20	22000

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
FEB									
19...	39	70	1900	.1	4	61	1	1	200
MAY									
15...	19	40	560	.0	13	24	3	0	70

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
FEB					MAY				
04...	0926	5.3	158	2.3	29...	1027	38	1020	105

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1510	1570	1480	1560	1530	---	---	1140	1660	1540	1710
2	---	1480	1530	---	1570	1550	---	---	1150	1730	1520	1710
3	---	1390	1490	1520	1560	1530	---	---	1160	1710	1510	1720
4	---	1400	1500	1540	1550	1530	1470	---	1160	1670	1500	1740
5	---	1480	1550	1600	1580	1520	1460	---	1190	1590	1500	1710
6	---	1570	1640	1610	1580	1480	1450	1290	1210	1600	1500	1680
7	---	1560	1600	1590	1590	1500	1440	1320	1230	1590	1520	1680
8	---	1540	1570	1610	1640	1520	1480	1200	1240	1590	1520	1670
9	---	1500	---	1610	1620	1510	---	1070	1260	1630	1500	1650
10	---	1480	---	1600	1530	1500	---	1070	1280	1650	1500	1650
11	1790	1470	---	1680	1470	1540	---	1080	1290	1670	1540	1640
12	1890	1480	---	1610	1440	1520	---	1060	1290	1650	1610	1610
13	1960	1450	---	1550	1430	1510	---	1070	1310	1620	1610	1610
14	1950	1500	---	1460	1430	1480	---	1090	1320	1620	1640	1620
15	1920	1420	---	1540	1300	1460	---	1090	1350	1630	1630	1590
16	1890	1360	---	1560	1200	1460	---	1020	1370	1630	1620	1610
17	1880	---	---	1570	1140	1540	---	1050	1410	1630	1620	1680
18	1920	---	1600	1560	1130	1540	---	1030	---	1610	1620	1750
19	1870	---	1530	1570	666	1530	---	1040	1470	1610	1620	1760
20	1890	---	1510	1570	1100	1530	---	1040	1510	1580	1620	1760
21	1850	---	1540	1560	1480	1510	---	1050	1510	1590	1640	1760
22	1740	---	1510	1530	1610	1480	---	1100	1520	1590	1650	1760
23	1550	---	1500	1590	1610	1520	---	1040	1520	1580	1660	1720
24	1520	---	1540	1610	1660	1520	---	1020	1520	1560	1690	1690
25	1510	---	1500	1640	1650	1500	---	1010	1540	1520	1690	1690
26	1500	---	1500	1660	1550	1400	---	1030	1570	1510	1680	1700
27	1510	---	1460	1690	1380	1410	---	1060	1580	1530	1690	1660
28	1520	1450	1420	1670	1370	1360	---	1080	1610	1540	1700	1680
29	1440	1510	1480	1630	1470	---	1190	1100	1620	1560	1700	1670
30	1480	1570	1530	1580	---	---	1240	1110	1620	1560	1700	1680
31	1500	---	1540	1590	---	---	---	1130	---	1570	1710	---

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	6.5	.5	2.0	.5	4.5	1.5	5.0	.5	12.5	3.0
2	---	---	8.0	.5	2.0	.5	5.0	1.0	6.0	.5	7.0	1.5
3	---	---	8.0	1.5	4.5	1.0	3.5	.0	7.5	2.5	8.0	3.5
4	---	---	8.0	3.0	5.5	.5	6.0	2.0	7.0	2.0	9.5	3.5
5	---	---	9.0	2.0	7.0	3.0	5.5	1.0	6.5	.5	8.5	3.0
6	---	---	8.5	2.0	6.5	1.0	3.5	.5	6.0	1.5	5.5	3.5
7	---	---	8.0	4.5	6.5	1.0	4.5	.5	6.0	1.0	9.5	2.0
8	---	---	8.0	4.0	6.5	2.0	5.0	1.0	2.5	.5	10.0	2.0
9	---	---	7.5	4.0	---	---	5.0	1.5	1.5	.0	9.5	1.0
10	---	---	8.0	2.5	---	---	5.0	.0	1.5	.0	12.0	1.0
11	13.5	7.5	7.0	3.0	---	---	2.5	.0	2.5	.5	8.0	1.0
12	13.5	7.5	8.0	1.0	---	---	5.0	2.0	5.5	.5	9.0	2.0
13	14.0	7.0	8.5	1.5	---	---	6.0	3.0	7.5	.5	11.0	.0
14	11.0	7.5	8.0	1.5	---	---	4.5	3.5	7.0	2.5	13.0	1.5
15	13.0	7.5	8.5	1.0	---	---	6.5	4.0	8.5	3.5	10.5	3.0
16	13.0	8.0	8.5	1.0	---	---	6.5	4.0	8.5	3.5	8.5	1.0
17	12.0	7.5	7.5	1.0	---	---	6.5	3.0	7.5	3.0	8.5	.5
18	12.5	8.0	7.0	4.5	4.0	.5	6.0	3.0	7.0	3.5	11.5	.5
19	12.5	8.5	5.5	2.0	4.0	.5	4.0	1.5	5.5	2.5	14.0	3.0
20	8.5	6.0	6.5	1.5	5.0	.5	5.5	.5	5.5	2.0	14.0	2.0
21	9.0	7.0	5.0	1.0	4.5	.5	5.5	.5	6.5	2.5	13.5	2.5
22	10.0	6.0	2.5	1.0	5.5	3.5	5.5	.5	8.0	2.5	7.5	3.5
23	10.5	4.5	3.5	1.0	5.5	.5	4.5	.5	6.5	2.0	11.5	3.5
24	11.0	4.5	5.5	1.5	4.0	.5	7.0	.5	9.0	.0	12.5	3.5
25	11.5	4.5	5.0	3.0	4.0	1.0	6.0	1.5	8.5	.0	7.0	2.5
26	12.0	5.0	5.0	2.0	4.0	.5	4.5	.5	10.5	.5	12.0	1.5
27	10.5	4.5	2.0	.5	3.5	2.0	3.5	.5	11.5	1.0	11.0	.5
28	9.5	3.0	1.5	1.0	4.0	2.5	2.5	.5	10.0	1.5	8.5	2.5
29	6.0	2.5	2.0	1.0	2.0	.5	6.5	1.0	7.0	4.0	12.0	3.0
30	7.5	2.0	2.0	.5	1.0	.0	3.5	.5	---	---	7.5	1.5
31	6.5	.0	---	---	1.5	.5	1.5	.0	---	---	9.5	.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	14.0	2.0	15.0	7.0	15.5	7.0	19.0	10.0	18.5	11.0	15.5	8.0
2	7.5	2.5	16.5	6.0	17.0	7.0	15.5	10.0	21.5	10.5	15.5	8.0
3	13.0	1.0	14.5	6.0	18.0	7.0	19.5	9.0	20.0	9.0	15.0	8.5
4	16.0	4.0	16.0	7.0	18.5	7.5	19.5	8.5	21.0	8.0	15.5	8.5
5	15.5	4.0	18.0	7.5	17.0	7.5	19.5	7.0	21.5	8.5	15.5	8.0
6	12.0	4.0	16.0	7.5	17.0	8.5	19.5	7.0	21.5	9.0	15.0	9.0
7	10.0	2.5	12.5	8.5	17.5	9.0	15.5	8.0	22.0	9.0	14.0	9.5
8	16.5	1.5	15.0	8.0	17.0	9.0	19.0	9.0	21.5	9.0	13.5	9.5
9	---	---	14.5	8.0	20.0	9.0	19.0	8.0	20.0	11.0	12.0	10.0
10	---	---	15.5	7.0	18.0	6.0	18.0	9.0	21.5	9.5	13.0	10.0
11	---	---	12.5	7.0	18.5	7.0	18.5	9.0	21.0	8.0	15.5	9.0
12	---	---	9.5	5.0	19.5	8.5	16.5	8.0	19.0	7.5	13.5	9.5
13	---	---	13.5	5.5	19.0	7.0	16.0	10.0	18.5	9.5	15.0	9.0
14	---	---	13.5	5.0	18.5	8.0	19.0	8.5	20.0	11.0	14.5	8.0
15	---	---	13.5	7.0	19.5	8.5	19.5	6.5	20.0	12.0	15.5	8.0
16	---	---	14.0	5.5	20.5	8.5	20.0	6.5	17.5	9.5	15.5	9.5
17	---	---	13.0	5.5	20.5	6.5	18.5	7.0	20.0	8.5	15.5	8.5
18	---	---	17.0	3.5	---	---	20.0	8.5	19.5	8.0	15.0	9.0
19	---	---	17.5	7.0	17.5	9.0	20.5	9.5	17.5	7.5	16.0	10.0
20	---	---	18.0	5.5	19.0	8.0	21.5	9.0	19.5	7.5	15.5	10.0
21	---	---	19.0	5.5	20.5	7.5	22.5	9.5	19.5	7.0	14.5	9.0
22	---	---	17.5	6.0	21.0	8.0	22.0	9.0	18.5	7.0	14.5	8.5
23	---	---	16.5	6.5	18.5	7.5	20.0	10.5	17.5	9.5	14.5	8.0
24	---	---	14.0	6.0	20.0	7.0	20.5	9.5	16.0	11.0	14.5	8.0
25	---	---	12.5	3.5	20.0	7.0	20.0	9.0	17.0	9.5	14.5	8.0
26	---	---	15.5	3.5	20.5	7.5	21.0	9.0	18.5	9.0	14.5	8.0
27	---	---	17.0	5.0	20.0	8.0	22.5	9.5	17.0	9.0	14.5	8.0
28	---	---	18.0	5.5	20.5	7.0	23.0	9.5	16.5	8.5	14.5	8.0
29	14.5	6.0	15.5	7.5	19.5	7.0	20.0	9.0	14.5	9.0	14.5	8.0
30	14.0	6.5	18.0	7.0	20.5	10.0	20.0	11.0	14.5	8.5	14.5	8.0
31	---	---	15.0	6.5	---	---	22.0	9.5	13.5	8.5	---	---

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	1.6	---	.03	6.8	---	.80	3.4	---	1.1
2	1.8	---	.04	7.3	---	.80	3.6	---	1.3
3	1.8	---	.04	7.3	---	.80	3.6	---	1.5
4	1.8	---	.04	7.3	---	.80	6.2	---	3.3
5	1.9	---	.04	7.3	---	.70	6.5	250	4.4
6	1.9	---	.04	8.1	35	.76	6.5	200	3.5
7	2.1	---	.05	8.1	88	1.9	6.1	165	2.7
8	2.1	---	.05	8.1	63	1.4	6.1	190	3.1
9	2.1	---	.05	7.7	120	2.5	5.7	175	2.7
10	2.1	---	.05	7.6	120	2.5	5.7	145	2.2
11	2.2	---	.06	8.0	90	1.9	5.7	145	2.2
12	2.2	---	.06	7.6	100	2.1	4.5	---	1.8
13	2.2	---	.06	7.2	130	2.5	4.7	---	1.9
14	2.4	---	.07	7.2	170	3.3	4.9	---	2.0
15	2.5	---	.08	6.8	135	2.5	5.3	---	2.5
16	2.5	---	.08	6.4	160	2.8	6.0	---	3.2
17	2.9	---	.09	6.4	165	2.9	6.0	---	3.2
18	2.9	---	.09	6.7	140	2.5	6.0	---	3.2
19	2.9	---	.09	6.7	120	2.2	5.3	240	3.4
20	3.5	12	.11	6.3	100	1.7	6.0	250	4.1
21	4.4	27	.33	5.9	150	2.4	6.4	270	4.7
22	8.5	30	.69	5.3	124	2.1	5.9	245	3.9
23	11	35	1.0	5.7	130	2.4	5.9	250	4.0
24	9.9	28	.75	5.9	210	3.3	5.5	245	3.6
25	8.8	48	1.1	5.9	---	3.0	6.2	255	4.3
26	8.3	33	.74	5.9	---	3.0	5.5	220	3.3
27	7.8	25	.53	5.4	---	3.0	5.4	245	3.6
28	7.8	48	1.0	4.6	---	2.0	5.4	260	3.8
29	8.8	43	1.0	4.1	---	2.0	5.4	---	3.8
30	8.2	83	1.8	3.2	---	1.0	5.4	---	3.8
31	7.1	---	1.1	---	---	---	5.4	---	4.1
TOTAL	136.0	---	11.26	196.8	---	61.56	170.2	---	96.2

BEST DOCUMENT AVAILABLE

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	5.4	---	4.1	5.9	265	4.4	7.2	420	8.2
2	5.3	---	4.0	5.3	248	3.5	7.2	370	7.2
3	5.3	360	5.2	5.3	187	2.7	7.2	410	8.0
4	5.7	150	2.3	4.9	225	3.0	7.2	340	6.6
5	5.6	185	2.8	4.9	273	3.7	7.2	350	6.8
6	4.9	175	2.3	5.3	290	4.1	7.2	410	8.0
7	4.9	165	2.2	5.6	278	4.2	7.2	380	7.4
8	5.2	170	2.4	4.9	267	3.9	7.2	330	6.4
9	5.6	220	3.3	4.6	215	3.5	6.4	300	5.2
10	6.3	175	3.0	5.4	198	3.6	6.4	320	5.5
11	5.5	315	4.7	5.8	246	5.0	6.8	270	5.0
12	7.4	165	3.3	6.0	239	4.8	6.8	---	5.0
13	11	480	14	6.4	330	5.7	6.4	---	4.7
14	12	480	16	6.8	360	6.6	6.0	---	4.5
15	11	300	8.9	7.6	956	23	6.0	---	4.5
16	9.7	280	7.3	8.5	1080	25	6.4	---	4.8
17	8.2	260	5.8	9.0	1700	44	5.6	---	5.8
18	7.3	220	4.3	26	2680	340	6.1	---	5.0
19	6.5	230	4.0	31	3160	306	6.4	---	5.0
20	5.7	200	3.1	16	1450	63	6.2	290	4.9
21	4.9	170	2.2	9.0	610	15	6.2	250	4.2
22	4.9	180	2.4	8.0	396	8.6	6.9	360	6.7
23	4.9	240	3.2	7.2	270	5.2	6.8	250	4.6
24	4.9	190	2.5	6.4	250	4.3	6.8	240	4.4
25	5.3	190	2.7	6.4	250	4.3	6.7	260	4.7
26	4.9	220	2.9	7.2	290	5.6	6.6	270	4.8
27	4.4	---	3.0	9.1	801	28	5.9	310	4.9
28	5.3	---	3.0	9.0	985	28	6.0	270	4.4
29	5.3	---	2.0	8.0	530	11	5.8	230	3.6
30	5.5	166	2.6	---	---	---	5.7	320	4.9
31	5.1	213	2.7	---	---	---	5.5	230	3.4
TOTAL	193.9	---	132.2	245.5	---	969.7	202.0	---	169.1

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°55'16", long 108°17'49", in sec.32, T.1 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank at downstream side of bridge, 40 ft (12 m) downstream from Ryan Gulch, and 23 mi (37 km) northwest of Rio Blanco.

DRAINAGE AREA.--506 mi² (1,310 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WDR Colo. 1973: 1972(M); WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,070 ft (1,850 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation above station.

AVERAGE DISCHARGE.--16 years, 20.2 ft³/s (0.572 m³/s) 14,630 acre-ft/yr (18.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 400 ft³/s (11 m³/s), estimated, Mar. 9, 1966, gage height, 6.23 ft (1.899 m); minimum daily, 0.21 ft³/s (0.006 m³/s) May 21, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 169 ft³/s (4.79 m³/s) at 1800 May 18, gage height, 4.86 ft (1.481 m), only peak above base of 100 ft³/s (2.8 m³/s); minimum daily, 8.1 ft³/s (0.229 m³/s) Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	34	22	25	22	36	30	77	71	11	35	26
2	8.1	33	22	25	24	32	30	75	66	16	39	25
3	9.7	33	22	25	24	31	29	76	59	20	40	23
4	9.8	33	22	25	23	30	29	77	51	16	40	23
5	9.2	33	24	25	23	32	30	78	47	16	42	22
6	10	34	29	25	23	31	31	79	44	14	42	22
7	11	33	28	25	23	32	31	81	33	16	41	22
8	11	34	28	25	23	31	31	90	25	17	40	24
9	11	33	28	25	23	31	31	102	24	14	39	24
10	10	33	28	25	24	30	31	113	24	14	37	25
11	9.8	33	29	22	24	31	31	112	24	13	34	20
12	11	32	24	25	24	31	31	139	26	15	33	19
13	13	32	24	27	24	30	31	161	26	18	36	19
14	12	32	24	35	24	30	31	160	24	20	37	20
15	11	31	24	30	28	30	33	163	25	20	38	20
16	13	31	22	28	33	32	33	164	24	20	38	19
17	13	31	22	27	35	29	34	164	23	19	36	18
18	13	33	22	27	56	29	41	166	23	16	35	18
19	13	33	20	27	61	29	59	167	22	15	35	18
20	17	33	22	27	54	29	68	150	20	15	34	19
21	28	32	24	27	37	30	78	139	20	15	34	18
22	31	32	26	27	33	33	81	134	19	15	35	19
23	33	32	29	27	33	31	70	130	21	16	34	19
24	34	32	28	30	30	30	64	126	20	18	34	14
25	30	30	28	26	28	33	62	119	13	26	34	9.6
26	30	30	28	26	30	33	58	120	9.7	26	32	8.6
27	31	28	25	25	31	30	57	110	9.6	25	31	9.4
28	30	24	25	25	36	31	55	101	9.8	25	29	10
29	28	22	25	24	36	30	58	92	9.9	25	28	11
30	35	22	25	24	---	31	68	85	10	28	26	9.7
31	34	---	25	22	---	31	---	81	---	33	26	---
TOTAL	568.2	938	774	808	889	959	1346	3631	823.0	577	1094	554.3
MEAN	18.3	31.3	25.0	26.1	30.7	30.9	44.9	117	27.4	18.6	35.3	18.5
MAX	35	34	29	35	61	36	81	167	71	33	42	26
MIN	8.1	22	20	22	22	29	29	75	9.6	11	26	8.6
AC-FT	1130	1860	1540	1600	1760	1900	2670	7200	1630	1140	2170	1100

CAL YR 1979 TOTAL 11293.7 MEAN 30.9 MAX 128 MIN 4.9 AC-FT 22400
WTR YR 1980 TOTAL 12961.5 MEAN 35.4 MAX 167 MIN 8.1 AC-FT 25710

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1970 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1979 to September 1980.
WATER TEMPERATURE: December 1979 to September 1980.
SUSPENDED-SEDIMENT DISCHARGE: October 1972 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since October 1972. Water-quality monitor since December 1979. 1972.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily, 21,700 mg/L July 20, 1977; minimum daily, 8 mg/L Oct. 14, 1979.
SEDIMENT LOADS: Maximum daily, 4,160 tons (3,770 t) July 20, 1977; minimum daily, 0.19 ton (0.17 t) May 10, 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,980 micromhos Sept. 26; minimum, 593 micromhos Feb. 18.
WATER TEMPERATURE: Maximum, 23.5°C July 28; minimum, 0.0°C many days during December to February.
SEDIMENT CONCENTRATIONS: Maximum daily, 4,060 mg/L Apr. 22; minimum daily, 8 mg/L Oct. 14.
SEDIMENT LOADS: Maximum daily, 1,400 tons (1,270 t) May 12, 13; minimum daily, 0.26 ton (0.24 t) Oct. 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT												
22...	1345	32	1730	8.3	9.0	10.2	590	21	85	91	200	3.6
NOV												
15...	1340	30	1420	8.5	4.0	10.7	490	44	78	72	150	2.9
DEC												
18...	1315	21	1440	8.2	.5	--	510	19	82	73	150	2.9
JAN												
23...	1500	25	1480	8.3	1.0	11.4	550	65	85	80	160	3.0
FEB												
19...	1730	E61	1050	8.0	--	--	260	0	36	42	150	4.0
MAR												
26...	1215	31	1350	8.2	6.5	10.0	460	26	74	65	140	2.9
APR												
21...	1145	99	703	7.8	8.5	9.2	210	0	37	28	78	2.4
MAY												
20...	1130	152	1000	8.1	10.0	--	370	18	69	47	89	2.0
JUN												
10...	1530	24	1505	8.0	9.5	7.0	520	33	81	77	160	3.1
JUL												
15...	1320	22	1700	8.1	18.0	8.6	580	0	80	91	210	3.8
AUG												
19...	1005	35	1440	8.0	11.5	8.5	460	0	71	67	170	3.5
SEP												
17...	1015	19	1675	8.0	10.5	7.0	550	0	75	86	200	3.7

E ESTIMATED.

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)
OCT												
22...	4.8	570	460	17	.8	19	1220	1.6	105	.17	.020	.19
NOV												
15...	3.1	450	330	10	.8	16	936	1.2	75.8	.54	.020	.56
DEC												
18...	2.8	490	350	12	.6	18	989	1.3	56.1	.54	.020	.56
JAN												
23...	2.8	480	360	11	.6	18	1010	1.3	68.2	.46	.020	.48
FEB												
19...	5.5	350	170	21	.6	15	654	.89	E93.6	.32	.130	.45
MAR												
26...	2.4	430	320	13	.2	15	893	1.2	74.7	.55	.010	.56
APR												
21...	2.8	210	130	9.0	.5	10	425	.58	114	.40	.010	.41
MAY												
20...	2.6	350	200	8.6	.5	16	650	.88	267	1.2	.010	1.2
JUN												
10...	2.9	490	340	11	.5	19	992	1.3	64.3	.52	.010	.53
JUL												
15...	4.6	600	430	18	1.1	18	1220	1.6	72.5	.05	.000	.05
AUG												
19...	3.5	460	340	12	1.2	18	965	1.3	91.2	.49	.010	.50
SEP												
17...	3.6	550	410	17	1.2	19	1150	1.5	59.0	.19	.010	.20

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)
OCT												
22...	.21	.040	1.2	1.20	1.4	.170	.040	.030	3	80	250	< 1
NOV												
15...	.54	.030	.82	.85	1.4	.080	.020	.010	3	70	180	1
DEC												
18...	.56	.040	.68	.72	1.3	.100	.030	.030	2	80	170	< 1
JAN												
23...	.53	.050	.63	.68	1.2	.330	.040	.050	2	70	180	< 1
FEB												
19...	.37	.500	3.9	4.40	4.9	1.40	.210	.110	3	200	190	0
MAR												
26...	.46	.000	.91	.91	1.5	.100	.070	.030	2	70	160	< 1
APR												
21...	.41	.100	12	12.0	12	2.30	.540	.000	2	60	100	< 1
MAY												
20...	1.2	.010	1.8	1.80	3.0	.750	.010	.020	3	90	140	1
JUN												
10...	.53	.040	1.1	1.10	1.6	.220	.050	.030	4	100	180	< 1
JUL												
15...	.05	.000	.66	.66	.71	.170	.030	.030	4	90	270	< 1
AUG												
19...	.55	.000	.92	.92	1.4	.130	.030	.050	3	80	240	2
SEP												
17...	.20	.020	1.1	1.10	1.3	.060	.020	.010	4	90	280	< 1

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	PHENOLS (UG/L)
OCT 22...	0	30	0	20	70	.0	1	3200	6	.00	0
NOV 15...	0	10	0	20	20	.0	1	2800	<3	.10	--
DEC 18...	0	40	0	20	20	.0	1	3100	4	.00	0
JAN 23...	0	20	0	20	30	.0	1	3300	<3	.00	--
FEB 19...	4	130	0	10	60	.0	0	1400	10	.00	4
MAR 26...	2	20	0	20	20	.0	1	2700	4	.00	--
APR 21...	0	10	0	20	10	.0	1	1000	<3	.10	--
MAY 20...	3	<10	2	10	9	.0	2	1600	<3	.00	0
JUN 10...	4	<10	2	9	20	.1	1	3100	6	.00	--
JUL 15...	2	10	0	10	50	.0	1	3400	8	.00	--
AUG 19...	3	<10	0	9	8	.0	1	2700	6	.30	--
SEP 17...	2	20	1	10	30	.0	1	3300	6	.00	3

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
FEB 19...	1730	0	8	800	0	0	60	22	42	26000
MAY 20...	1130	13000	7	600	0	0	50	12	25	27000
SEP 17...	1015	220	4	100	0	1	0	1	4	390

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
FEB 19...	19	50	800	.1	6	29	1	1	120
MAY 20...	21	60	690	.1	6	29	2	0	110
SEP 17...	1	20	50	.0	8	5	1	0	20

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---	---	1280	1400	1400	922	1220	---	1560	1440
2			---	---	1410	1400	1390	927	1200	---	1520	1440
3			---	---	1420	1390	1400	913	1250	---	1490	1480
4			---	---	1410	1370	1400	907	1270	---	1440	1470
5			---	1370	1430	1410	1390	907	1300	---	1400	1470
6			---	1360	1420	1410	1360	905	1330	---	1420	1480
7			1360	1360	1400	1400	1360	878	1380	---	1480	1470
8			1450	1400	1430	1440	1370	861	1410	1800	1470	1480
9			1440	1420	1480	1460	1360	869	1390	1850	1470	1530
10			1430	1400	1410	1460	---	862	1430	1810	1470	1580
11			1400	1430	1330	1450	---	890	1460	1810	1440	1660
12			1540	1370	1330	1430	---	895	1480	1770	---	1660
13			1510	1400	1320	1450	---	---	1530	1730	---	1670
14			1480	1370	1430	1450	---	---	1550	1710	---	1680
15			1420	1410	1380	1420	---	---	1580	1700	---	1680
16			1390	1440	1290	1370	---	---	1600	1700	---	1680
17			1380	1450	1290	1450	1270	---	1610	1700	---	1700
18			1370	1440	1060	1450	1200	---	1610	1710	---	1720
19			1400	1430	898	1430	993	971	1650	1710	---	1730
20			1370	1450	909	1410	869	996	1650	1720	---	1720
21			1370	1440	985	1400	816	1020	1660	1700	---	1710
22			1380	1410	1440	1350	831	1020	1650	1680	---	1700
23			1400	1410	1420	1390	933	1010	1660	1680	---	1700
24			1380	1400	1440	1390	958	1020	1670	1690	---	1800
25			1400	1400	1470	1370	987	1030	1780	1620	---	1850
26			1390	1380	1440	1390	990	1030	1790	1590	---	1910
27			1400	1370	1370	1430	998	1050	---	1580	---	1880
28			1390	1320	1290	1430	1010	1070	---	1570	1400	1870
29			1400	1330	1320	1410	988	1180	---	1620	1400	1840
30			---	1380	---	1410	950	1220	---	1660	1430	1860
31			---	1380	---	1380	---	1220	---	1610	1420	---

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1					---	---	.5	.5	.5	.5	9.5	3.0
2					---	---	3.5	.0	3.5	.5	6.5	2.5
3					---	---	.0	.0	6.0	1.5	6.5	4.0
4					---	---	.0	.0	6.5	3.0	8.0	3.5
5					---	---	3.0	.0	5.0	.0	8.0	3.5
6					---	---	2.5	.0	4.0	1.0	6.0	4.5
7					3.0	2.5	2.0	.0	4.5	1.0	8.0	2.5
8					5.5	2.5	3.5	.0	1.5	.5	9.0	3.5
9					4.5	.5	3.5	1.5	1.0	.5	8.5	2.5
10					5.0	1.0	5.0	.0	.5	.5	10.5	2.5
11					3.5	.5	.0	.0	.5	.5	7.5	3.0
12					.5	.5	3.5	.0	.5	.5	8.5	3.5
13					.5	.5	6.0	2.5	4.5	.0	9.5	1.0
14					.5	.5	4.5	4.0	5.5	3.0	11.0	2.5
15					.5	.5	6.0	3.5	6.5	4.0	10.0	4.5
16					.5	.5	6.0	4.0	7.5	3.5	8.0	2.5
17					.5	.5	6.0	3.0	6.5	3.0	7.0	.5
18					.5	.5	5.0	3.5	7.0	1.5	10.0	.5
19					.5	.5	3.0	1.0	7.0	2.0	12.0	4.0
20					.5	.5	3.5	.5	5.5	3.0	11.5	3.0
21					.5	.5	3.5	.5	6.0	3.5	11.0	3.0
22					4.0	.5	3.5	.5	7.0	3.5	7.5	5.0
23					4.0	1.0	2.0	.5	5.5	2.0	10.0	4.0
24					1.5	.0	4.0	.5	7.0	.0	10.5	4.0
25					3.5	.0	5.5	.5	7.0	.0	7.0	2.5
26					2.0	.0	2.5	.5	8.5	1.0	9.5	1.0
27					2.5	1.0	.5	.5	9.0	2.0	8.5	.5
28					3.0	1.5	.5	.5	8.5	2.0	6.5	3.0
29					1.5	.0	3.5	.5	6.0	4.5	10.0	3.0
30					.5	.0	2.5	.0	---	---	6.0	2.5
31					.5	.0	.5	.0	---	---	7.5	1.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.5	2.5	12.0	8.5	15.5	8.0	---	---	20.5	13.5	18.0	8.0
2	7.0	3.5	14.0	7.5	17.5	7.5	---	---	22.0	13.0	19.0	8.5
3	11.0	1.5	12.5	8.0	18.5	9.5	---	---	20.0	12.0	19.5	9.5
4	14.5	5.0	13.0	8.5	19.0	11.5	---	---	20.5	11.0	20.0	9.5
5	12.5	5.5	14.0	9.0	19.5	8.5	---	---	21.5	12.5	19.5	9.5
6	9.5	6.0	13.0	8.5	19.0	9.0	---	---	22.0	12.5	19.0	11.5
7	8.0	3.0	11.0	9.0	20.5	9.0	---	---	21.5	13.0	17.5	13.0
8	12.5	1.0	12.5	8.5	20.5	9.5	22.0	16.0	20.5	14.0	17.0	12.0
9	13.5	4.0	11.5	9.0	21.5	9.5	21.5	11.5	22.0	12.5	15.5	12.0
10	---	---	13.5	8.0	21.5	9.0	21.5	12.0	22.0	10.5	17.0	13.0
11	---	---	11.5	8.5	21.0	9.5	21.5	13.0	19.0	10.5	19.0	9.5
12	---	---	8.5	6.5	20.5	9.5	20.5	12.0	19.5	13.0	18.0	11.0
13	---	---	---	---	20.0	8.0	19.5	13.5	18.5	13.5	19.5	9.5
14	---	---	---	---	21.0	8.5	21.5	12.0	20.0	15.5	18.5	9.0
15	---	---	---	---	22.0	8.5	22.0	10.5	17.5	14.0	19.0	8.5
16	---	---	---	---	22.0	9.0	22.5	10.5	18.5	10.0	20.0	11.0
17	15.0	4.5	---	---	22.5	10.0	22.0	11.0	---	---	19.5	8.5
18	14.0	5.5	---	---	19.5	11.0	22.5	11.5	---	---	19.0	8.5
19	13.0	5.5	16.5	9.0	20.5	9.0	21.0	12.0	---	---	19.0	10.0
20	13.0	5.5	17.5	8.5	22.0	9.0	22.5	11.0	---	---	18.5	10.0
21	12.0	7.0	19.0	9.5	22.0	9.0	23.0	10.5	---	---	16.5	8.0
22	11.5	9.0	18.0	10.0	20.0	8.5	22.0	10.5	---	---	16.5	7.0
23	12.5	7.5	16.5	9.5	21.5	8.0	20.5	11.5	---	---	16.0	6.5
24	11.5	9.0	13.0	8.5	21.5	8.0	21.0	11.0	---	---	17.0	6.5
25	14.0	6.0	12.0	5.0	21.5	9.5	20.5	11.0	---	---	17.0	6.0
26	14.5	6.5	14.0	6.0	21.5	9.5	21.5	11.0	---	---	18.0	6.0
27	14.5	6.5	15.5	7.0	---	---	23.0	11.5	---	---	17.5	7.0
28	12.5	7.0	16.5	7.5	---	---	23.5	11.5	19.5	15.5	16.5	7.0
29	13.0	8.0	15.0	9.0	---	---	20.0	11.5	17.5	11.0	17.5	7.0
30	12.0	8.0	17.0	8.0	---	---	20.5	13.0	15.5	9.0	18.0	6.5
31	---	---	15.5	7.5	---	---	22.0	12.0	15.0	9.0	---	---

09306202 HORSE DRAW NEAR RANGELY, CO

LOCATION.--Lat 39°55'59", long 108°18'59", in NE¼SE¼ sec.30., T.1 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050007, on right bank 1.2 mi (1.9 km) upstream from mouth, 3.4 mi (5.5 km) southwest of Square S Ranch, and 28 mi (45 km) southeast of Rangely.

DRAINAGE AREA.--1.47 mi² (3.81 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,280 ft (1,914 m), from topographic map.

REMARKS.--Records excellent except for days of flow, which are poor. No regulation or diversions.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11 ft³/s (0.31 m³/s) Sept. 11, gage height, 1.55 ft (0.472 m); no flow most days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.2 ft³/s (0.034 m³/s) at 1430 Feb. 18, gage height, 1.27 ft (0.387 m); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

FEB 18	0.11	FEB 19	0.01

CAL YR 1979	TOTAL 0.00	MEAN 0.000	MAX 0.00	MIN 0.00	AC-FT 0.00
WTR YR 1980	TOTAL 0.12	MEAN 0.000	MAX 0.11	MIN 0.00	AC-FT 0.2

09306202 HORSE DRAW NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1977 to current year.

INSTRUMENTATION.--Water-quality monitor since August 1977. Pumping sediment sampler since August 1977.

REMARKS.--Flow occurred only on days shown.

WATER-QUALITY DATA, OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM AD-SORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)
FEB 18...	1700	.14	89	7.9	.0	38	0	14	.8	2.1	.1	1.5

DATE	ALKALINITY FIELD (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)
FEB 18...	43	1.4	.9	.0	3.6	51	.07	.02	.18	.130	1	40

DATE	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)
FEB 18...	110	< 1	0	40	0	< 4	1	.0	0	130	< 3

09306222 HORSE DRAW NEAR RANGELY, CO--CONTINUED

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.00			.00	---	---	.00		
2	.00			.00	---	---	.00		
3	.00			.00	---	---	.00		
4	.00			.00	---	---	.00		
5	.00			.00	---	---	.00		
6	.00			.00	---	---	.00		
7	.00			.00	---	---	.00		
8	.00			.00	---	---	.00		
9	.00			.00	---	---	.00		
10	.00			.00	---	---	.00		
11	.00			.00	---	---	.00		
12	.00			.00	---	---	.00		
13	.00			.00	---	---	.00		
14	.00			.00	---	---	.00		
15	.00			.00	---	---	.00		
16	.00			.00	---	---	.00		
17	.00			.00	---	---	.00		
18	.00			.11	42	.06	.00		
19	.00			.01	---	.00	.00		
20	.00			.00	---	---	.00		
21	.00			.00	---	---	.00		
22	.00			.00	---	---	.00		
23	.00			.00	---	---	.00		
24	.00			.00	---	---	.00		
25	.00			.00	---	---	.00		
26	.00			.00	---	---	.00		
27	.00			.00	---	---	.00		
28	.00			.00	---	---	.00		
29	.00			.00	---	---	.00		
30	.00			---	---	---	.00		
31	.00			---	---	---	.00		
TOTAL	0.00			0.12	---	0.06	0.00		
YEAR	0.12		0.06						

BEST DOCUMENT AVAILABLE

09306203 HORSE DRAW AT MOUTH, NEAR RANGELY, CO

LOCATION.--Lat 39°56'12", long 108°17'53", in SE¼NE¼ sec.29, T.1 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050007, on left bank 1,500 ft (460 m) upstream from mouth, 2.5 mi (4.0 km) southwest of Square S Ranch, and 29 mi (47 km) southeast of Rangely.

DRAINAGE AREA.--2.87 mi² (7.43 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1977 to current year.

REVISED RECORDS.--WDR CO-79-3: 1977(M), 1977.

GAGE.--Water-stage recorder. Altitude of gage is 6,110 ft (1,862 km), from topographic map.

REMARKS.--Records excellent except for periods of flow, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56 ft³/s (0.45 m³/s), July 24, 1977, gage height, 1.54 ft (0.469 m); no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.2 ft³/s (0.062 m³/s) at 1800 Feb. 27, gage height, 1.42 ft (0.433 m); no flow most of the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	1.0	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	1.1	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.40	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.95	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.35	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.50	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.52	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	4.92	.00	.00	.00	.00	.00	.00	.00
MEAN	.000	.000	.000	.000	.17	.000	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	1.1	.00	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	9.8	.00	.00	.00	.00	.00	.00	.00

CAL YR 1979 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00
WTR YR 1980 TOTAL 4.92 MEAN .013 MAX 1.1 MIN .00 AC-FT 9.8

09306203 HORSE DRAW AT MOUTH, NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1977 to current year.

INSTRUMENTATION.--Water quality monitor since October 1976. Pumping sediment sampler since October 1976.

REMARKS.--Flow occurred only on days shown.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
FEB												
18...	0950	.14	162	7.6	.5	11.3	64	0	21	2.8	5.8	.3
19...	1745	1.1	112	7.7	.0	--	48	0	15	2.6	4.2	.3

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)
FEB												
18...	9.5	68	8.0	1.8	.1	4.6	92	.13	.03	.24	.060	1
19...	4.4	49	5.0	1.1	.0	4.8	68	.09	.20	--	--	1

DATE	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)
FEB												
18...	75	170	4	2	170	0	< 4	9	.0	0	270	20
19...	60	40	< 1	1	430	0	< 4	10	.0	0	170	10

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
FEB					FEB				
19...	1325	.28	3790	2.9	20...	1315	.51	2334	3.2

09306203 HORSE DRAW AT MOUTH, NEAR RANGELY, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---							
2					---							
3					---							
4					---							
5					---							
6					---							
7					---							
8					---							
9					---							
10					---							
11					---							
12					---							
13					---							
14					---							
15					---							
16					---							
17					---							
18					80							
19					---							
20					---							
21					---							
22					---							
23					---							
24					---							
25					---							
26					---							
27					---							
28					---							
29					---							
30					---							
31					---							

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1									---	---		
2									---	---		
3									---	---		
4									---	---		
5									---	---		
6									---	---		
7									---	---		
8									---	---		
9									---	---		
10									---	---		
11									---	---		
12									---	---		
13									---	---		
14									---	---		
15									---	---		
16									---	---		
17									---	---		
18									.0	.0		
19									---	---		
20									---	---		
21									---	---		
22									---	---		
23									---	---		
24									---	---		
25									---	---		
26									---	---		
27									---	---		
28									---	---		
29									---	---		
30									---	---		
31									---	---		

GREEN RIVER BASIN

09306203 HORSE DRAW AT MOUTH, NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.00			.00	---	---	.00		
2	.00			.00	---	---	.00		
3	.00			.00	---	---	.00		
4	.00			.00	---	---	.00		
5	.00			.00	---	---	.00		
6	.00			.00	---	---	.00		
7	.00			.00	---	---	.00		
8	.00			.00	---	---	.00		
9	.00			.00	---	---	.00		
10	.00			.00	---	---	.00		
11	.00			.00	---	---	.00		
12	.00			.00	---	---	.00		
13	.00			.00	---	---	.00		
14	.00			.00	---	---	.00		
15	.00			.00	---	---	.00		
16	.00			.04	---	.00	.00		
17	.00			1.0	---	.40	.00		
18	.00			1.1	76	.38	.00		
19	.00			.40	2240	4.5	.00		
20	.00			.95	1430	5.0	.00		
21	.00			.35	---	.07	.00		
22	.00			.00	---	---	.00		
23	.00			.00	---	---	.00		
24	.00			.00	---	---	.00		
25	.00			.00	---	---	.00		
26	.00			.02	---	.01	.00		
27	.00			.50	---	.15	.00		
28	.00			.52	---	.30	.00		
29	.00			.04	---	.02	.00		
30	.00			---	---	---	.00		
31	.00			---	---	---	.00		
TOTAL	0.00			4.92	---	10.83	0.00		
YEAR	4.92		10.83						

BEST DOCUMENT AVAILABLE

09306222 PICEANCE CREEK AT WHITE RIVER, CO

LOCATION.--Lat 40°05'16", long 108°14'35", in SW¼NE¼ sec.2, T.1 N., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 900 ft (270 m) upstream from mouth, 1.0 mi (1.6 km) west of White River City, and 17 mi (27 km) west of Meeker.

DRAINAGE AREA.--630 mi² (1,632 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to September 1966, October 1970 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,705 ft (1,739 m), from topographic map. Oct. 1, 1964, to Sept. 30, 1966, and Oct. 1, 1970, to July 12, 1974, at several sites 1.1 mi (1.8 km) upstream at different datums.

REMARKS.--Records good except for winter periods which are poor. Diversions for irrigation of about 5,500 acres (22.3 km²) above station.

AVERAGE DISCHARGE.--12 years, 25.3 ft³/s (0.716 m³/s), 18,330 acre-ft/yr (22.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 628 ft³/s (17.8 m³/s) Sept. 7, 1978, gage height, 7.04 ft (2.146 m) on basis of slope-area measurement of peak flow; minimum daily discharge, 0.50 ft³/s (0.014 m³/s) July 21, 22, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.8 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 19	0200	182	5.15	3.85	1.173	May 16	1915	*270	7.64	4.03	1.228
May 14	0200	190	5.38	3.72	1.134						

Minimum daily discharge, 4.2 ft³/s (0.119 m³/s) July 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	37	29	38	23	36	30	95	84	4.2	35	33
2	6.9	39	29	38	23	34	29	93	81	17	40	34
3	6.6	38	29	38	23	34	27	96	68	43	40	30
4	6.8	38	29	38	23	36	27	98	58	29	37	30
5	6.8	38	29	38	23	36	28	100	52	25	37	31
6	6.7	38	29	38	23	37	30	100	50	21	38	27
7	6.5	37	29	38	23	39	32	97	45	18	32	28
8	6.3	38	29	38	23	39	33	117	39	21	33	32
9	7.1	38	29	38	24	38	34	135	35	17	32	22
10	7.2	37	29	38	25	38	36	144	30	14	31	22
11	7.7	36	31	38	29	38	37	143	28	13	27	21
12	7.6	35	34	38	33	39	39	166	23	14	23	21
13	9.1	34	35	38	37	37	41	183	21	15	27	21
14	9.8	34	35	38	42	37	43	186	18	17	30	21
15	8.8	34	35	38	45	38	46	182	15	14	34	22
16	10	34	35	38	51	41	50	171	20	15	32	21
17	11	34	35	42	68	36	54	159	20	18	29	21
18	11	34	35	39	96	38	58	150	17	14	27	20
19	11	34	35	35	111	39	79	160	13	15	28	20
20	14	34	35	34	102	39	95	155	20	21	29	20
21	20	33	35	30	51	41	100	151	17	22	33	21
22	29	28	35	27	39	43	105	151	18	22	34	21
23	35	28	35	27	35	39	91	146	16	21	33	25
24	35	29	35	27	31	37	79	149	12	27	38	23
25	43	31	35	27	28	38	73	149	12	32	36	18
26	43	33	35	27	31	39	67	148	9.7	33	37	16
27	40	33	35	27	36	35	65	134	7.0	33	33	16
28	39	29	35	25	45	34	64	120	6.5	32	30	20
29	41	29	35	23	43	32	66	113	5.9	29	29	21
30	42	29	35	23	---	31	82	102	5.6	31	28	19
31	39	---	38	23	---	31	---	98	---	35	28	---
TOTAL	574.0	1023	1023	1044	1186	1149	1640	4191	846.7	682.2	1000	697
MEAN	18.5	34.1	33.0	33.7	40.9	37.1	54.7	135	28.2	22.0	32.3	23.2
MAX	43	39	38	42	111	43	105	186	84	43	40	34
MIN	6.3	28	29	23	23	31	27	93	5.6	4.2	23	16
AC-FT	1140	2030	2030	2070	2350	2280	3250	8310	1680	1350	1980	1380

CAL YR 1979 TOTAL 14849.5 MEAN 40.7 MAX 167 MIN 6.3 AC-FT 29450
WTR YR 1980 TOTAL 15055.9 MEAN 41.1 MAX 186 MIN 4.2 AC-FT 29860

BEST DOCUMENT AVAILABLE

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1970 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1971 to June 1974, May 1975 to current year.
WATER TEMPERATURES January 1971 to September 1974, May 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: March 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since May 1974. Pumping sediment sampler since March 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 9,500 micromhos July 16, 1972; minimum daily, 543 micromhos May 14, 1980.
WATER TEMPERATURES: Maximum, 32.0ºC July 14, 1978; minimum, freezing point on many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 25,000 mg/L estimated Sept. 7, 1978; 4 mg/L Oct. 2, 1977.
SEDIMENT LOADS: Maximum daily, 2,900 tons (2,630 t) estimated Sept. 7, 1978; minimum daily, 0.10 ton (0.09 t) June 22, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 5,050 micromhos July 1; minimum, 543 micromhos May 14.
WATER TEMPERATURES: Maximum, 28.0ºC July 16; minimum, 0.0ºC many days during November to February.
SEDIMENT CONCENTRATIONS: Maximum daily, 4,080 mg/L May 11; minimum daily, 13 mg/L Oct. 3.
SEDIMENT LOADS: Maximum daily, 1,890 tons (1,710 t) May 13; minimum daily, 0.23 ton (0.21 t) Oct. 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT												
22...	1540	28	2150	8.5	10.0	10.0	570	0	67	98	330	6.0
NOV												
15...	1100	E51	1660	8.6	.0	10.9	460	0	66	71	230	4.7
DEC												
19...	1550	35	1850	8.3	.0	10.4	510	0	75	77	260	5.0
JAN												
23...	1100	26	1980	8.4	.0	10.6	520	0	75	80	310	5.9
FEB												
20...	0200	146	1120	8.2	4.5	--	320	0	44	51	150	3.7
MAR												
26...	1310	44	1700	8.2	8.5	9.8	440	0	63	69	270	5.6
APR												
21...	0945	90	1150	8.1	9.5	9.1	330	0	52	47	160	3.9
MAY												
20...	1330	170	1100	8.2	15.0	--	360	0	63	48	130	3.0
JUN												
10...	0915	21	2320	8.2	12.5	8.4	530	0	66	89	390	7.4
JUL												
15...	0800	12	2550	8.3	12.0	7.6	550	0	56	100	440	8.2
AUG												
19...	1600	30	1820	8.3	18.5	--	430	0	54	70	270	5.7
SEP												
17...	1500	23	2000	8.3	17.5	8.0	460	0	53	80	320	6.5

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT												
22...	5.4	720	520	34	1.0	19	1510	2.0	114	.30	.020	.32
NOV												
15...	3.5	580	350	22	1.0	17	1120	1.5	E200	.66	.020	.68
DEC												
19...	3.5	680	360	27	.2	18	1240	1.6	117	1.1	.020	1.1
JAN												
23...	3.5	710	380	35	1.0	18	1340	1.8	94.1	.60	.040	.64
FEB												
20...	6.3	380	240	18	.6	16	759	1.0	299	.36	.140	.50
MAR												
26...	2.9	590	350	27	.3	15	1160	1.5	138	.37	.040	.41
APR												
21...	3.5	380	220	18	.9	17	752	1.0	183	.62	.020	.64
MAY												
20...	3.0	400	210	11	.5	18	731	.99	336	1.0	.080	1.1
JUN												
10...	4.1	830	430	43	1.0	19	1550	2.1	87.9	.59	.010	.60
JUL												
15...	5.3	900	510	43	1.5	11	1710	2.3	55.4	.02	.000	.02
AUG												
19...	4.2	580	410	29	1.2	17	1210	1.6	98.0	.91	.010	.92
SEP												
17...	3.8	670	400	36	1.3	17	1320	1.8	82.0	.39	.010	.40

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM DIS-SOLVED (UG/L AS CD)
OCT 22...	.33	.080	1.3	1.40	1.7	.150	.040	.040	3	400	330	0
NOV 15...	.66	.080	.79	.87	1.6	.090	.030	.010	3	80	240	2
DEC 19...	.93	.070	.55	.62	1.7	.100	.050	.050	4	90	250	:1
JAN 23...	.65	.110	.38	.49	1.1	.120	.060	.100	3	90	280	:1
FEB 20...	.39	.370	8.4	8.80	9.3	1.90	.170	.130	3	200	200	0
MAR 26...	.42	.150	1.3	1.40	1.8	.400	.180	.050	3	80	240	:1
APR 21...	.62	.100	4.2	4.30	4.9	2.00	.100	.000	3	90	170	:1
MAY 20...	1.1	.390	1.8	2.20	3.3	1.60	.380	.100	3	100	150	1
JUN 10...	.61	.070	2.9	3.00	3.6	.140	.090	.020	4	100	380	0
JUL 15...	.05	.000	.97	.97	.99	.850	.020	.010	5	100	480	0
AUG 19...	.93	.000	1.2	1.20	2.1	.140	.030	.050	4	90	350	1
SEP 17...	.39	.030	.59	.62	1.0	.080	.020	.010	4	90	370	:1

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L)	PHENOLS (UG/L)
OCT 22...	0	10	0	20	20	.0	1	2900	10	.00	0
NOV 15...	0	10	0	20	9	.0	1	2600	:3	.00	--
DEC 19...	0	:10	0	30	8	.0	1	2900	:3	.00	0
JAN 23...	0	:10	0	30	10	.0	1	2900	:3	.00	--
FEB 20...	4	440	0	10	30	.0	0	1800	10	.00	4
MAR 26...	2	90	0	30	10	.0	1	2500	4	.00	--
APR 21...	1	780	0	30	30	.0	1	1700	:3	.10	--
MAY 20...	2	50	1	20	10	.0	2	1600	10	.00	0
JUN 10...	2	50	0	30	0	.0	1	2000	0	.00	--
JUL 15...	2	30	0	30	10	.0	1	250	10	.00	--
AUG 19...	3	20	0	20	9	.0	1	2400	10	.10	--
SEP 17...	3	:10	0	30	7	.0	1	2600	3	.00	14

DATE	TIME	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
FEB 20...	0200	0	17	1600	0	0	130	31	50	65000
MAY 20...	1330	16000	11	800	0	1	50	15	29	37000
SEP 17...	1500	350	4	100	0	0	0	0	4	990

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)
FEB									
20...	31	90	1900	.0	5	54	1	1	210
MAY									
20...	26	70	960	.0	8	34	3	0	130
SEP									
17...	0	30	50	.0	9	8	1	0	20

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2590	1680	2050	---	1670	1880	1760	1040	1450	3490	1710	1790
2	2540	1650	2030	---	---	1880	1750	1050	1520	3030	1700	1750
3	2550	1650	1880	---	---	1860	1720	1040	1590	2430	1670	1760
4	2530	1650	1790	---	---	1800	1760	1030	1650	2490	1660	1810
5	2560	1650	1730	---	1720	1760	1750	1020	1700	2460	1650	1910
6	2590	1640	1700	---	1700	1760	1740	1030	1740	2410	1620	1920
7	2620	1660	1730	---	1720	1720	1710	1040	1830	2390	1650	1950
8	2650	1670	1750	---	1840	1810	1730	997	1930	2390	1680	1870
9	2610	1660	1830	---	2110	1900	1740	1010	2010	2480	1660	1770
10	2610	1650	1910	1860	2040	1880	1750	976	2140	2500	1680	1870
11	2600	1650	1900	2010	1890	1820	1680	1050	2330	2400	1700	1920
12	2570	---	2200	1990	1820	1780	1660	981	2590	2510	1740	1990
13	2530	---	2220	1830	1700	1780	1670	829	2880	2460	1660	1970
14	2490	1660	2260	1900	1610	1780	1660	855	2700	2330	1640	1980
15	2520	1660	2150	1950	1210	1730	1620	1000	2730	2410	1640	1960
16	2470	1660	1990	2020	1540	1660	1580	1030	2450	2370	1630	2000
17	2400	1660	1930	2100	1510	1700	1560	1070	2530	2250	1660	1970
18	2410	1690	1950	2070	1240	1710	1490	1050	2530	2350	1680	1970
19	2440	1640	1920	---	928	1750	1310	1060	2810	2390	1800	1990
20	2420	1590	1810	---	1170	1720	1100	1090	2570	2260	1780	2020
21	2340	---	1710	---	1700	1710	990	1110	2560	2210	1730	2010
22	2060	---	1640	---	1880	1680	931	1130	2490	2190	1660	1980
23	1960	---	1600	1760	1910	1710	1000	1130	2560	2110	1750	1980
24	1890	---	1690	1720	1830	1730	1110	1110	2550	1940	1630	2020
25	1780	---	1660	1650	1690	1700	1130	1130	2610	1930	1610	2170
26	1740	---	1690	1720	1630	1710	1160	1150	2810	1930	1620	2230
27	1750	---	1620	1780	1870	1790	1150	1180	2870	1910	1690	2220
28	1760	1800	1590	1790	1700	1780	1150	1220	2810	1900	1750	2160
29	1760	2050	1700	1800	1750	1750	1150	1280	2850	1890	1780	2120
30	1680	2080	1790	1680	---	1740	1150	1350	2940	1870	1820	2150
31	1670	---	2090	1830	---	1730	---	1390	---	1820	1830	---

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.0	7.5	3.5	1.0	.5	.0	.5	.5	.5	.0	8.5	2.5
2	18.0	7.5	5.5	1.0	.5	.0	1.0	.0	.0	.0	6.5	2.0
3	17.5	8.5	6.5	1.0	.5	.0	.5	.5	.0	.0	5.5	3.0
4	17.0	5.5	6.0	2.5	.0	.0	.5	.0	.5	.0	7.5	3.0
5	17.5	6.0	7.5	2.0	.5	.0	.5	.0	.5	.0	7.5	3.0
6	17.5	6.0	7.5	2.0	.5	.0	.5	.0	.5	.0	5.0	3.5
7	18.0	6.5	7.5	4.0	.5	.0	.5	.0	3.0	.0	5.5	.5
8	17.0	6.0	8.0	4.0	.0	.0	1.0	.0	1.0	.5	8.5	3.0
9	16.5	7.5	7.0	3.5	.5	.0	.0	.0	1.0	.5	9.0	2.5
10	16.5	6.0	7.0	2.0	.5	.0	.0	.0	1.0	.5	9.5	2.5
11	16.0	6.0	6.0	2.5	.0	.0	.5	.0	1.0	.5	8.0	2.5
12	14.5	6.0	---	---	.5	.0	.5	.0	1.0	.5	8.0	2.5
13	16.0	5.5	---	---	.5	.0	.5	.0	.5	.0	9.0	2.5
14	11.5	6.5	6.0	1.5	.5	.0	.0	.0	.5	.0	10.0	2.5
15	15.5	6.0	5.5	.5	.5	.0	.5	.0	1.0	.0	8.5	4.0
16	15.5	8.5	4.5	.5	.5	.0	2.5	.0	5.5	1.5	7.0	2.5
17	13.0	5.5	4.0	.5	.5	.0	4.0	2.0	5.0	3.0	7.5	1.0
18	14.0	8.5	6.0	3.0	.5	.0	3.5	1.5	4.0	1.5	9.0	.5
19	13.0	9.0	4.5	.5	.5	.0	---	---	5.0	1.0	11.5	4.0
20	10.0	6.5	3.0	.0	.5	.0	---	---	4.0	3.0	11.5	4.0
21	9.0	6.0	1.0	.0	.5	.0	---	---	6.0	3.5	10.5	4.0
22	9.5	4.0	.5	.0	.5	.0	---	---	6.5	3.0	9.0	5.5
23	10.5	5.0	.0	.0	.5	.0	.5	.0	5.0	2.0	10.0	4.0
24	10.0	5.5	.5	.0	.5	.0	.5	.0	6.5	.5	10.0	5.0
25	11.5	5.5	.5	.0	.5	.0	.5	.0	6.5	.5	7.5	3.5
26	10.5	6.0	.5	.0	.5	.0	.0	.0	7.0	1.0	9.5	2.0
27	10.5	6.0	.0	.0	.5	.0	.5	.0	8.0	1.5	9.5	2.0
28	9.0	4.5	.5	.0	.5	.0	.0	.0	7.5	2.5	6.5	3.5
29	6.5	3.5	.5	.0	1.0	.0	.0	.0	6.5	4.5	10.0	3.0
30	6.5	1.5	.5	.5	.5	.0	.5	.0	---	---	6.0	2.5
31	5.0	1.0	---	---	.5	.5	.5	.0	---	---	7.0	1.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.0	2.5	14.5	9.0			---	---	23.0	16.0	19.5	8.5
2	6.5	4.0	14.0	7.0			---	---	24.5	15.5	20.5	9.5
3	9.5	2.0	14.0	8.5			---	---	22.0	14.5	21.0	10.5
4	11.5	5.5	14.5	8.5			---	---	22.5	12.5	21.5	11.0
5	12.5	5.5	15.5	8.5			---	---	22.5	12.5	21.0	10.5
6	10.5	6.5	14.0	9.0			---	---	23.0	14.0	20.0	13.0
7	9.0	4.5	12.0	10.0			---	---	25.0	14.0	19.5	14.5
8	11.0	2.0	13.0	8.5			26.5	16.5	24.0	14.5	17.5	14.0
9	7.0	4.5	13.0	9.5			26.5	14.5	22.5	16.0	16.0	13.5
10	---	---	12.5	8.5			26.0	15.5	23.5	13.5	17.5	13.5
11	---	---	11.5	8.0			24.5	16.5	23.5	12.0	17.0	10.0
12	---	---	8.0	6.0			24.5	14.5	21.0	11.5	20.0	12.0
13	---	---	12.0	6.0			23.0	16.5	22.0	13.5	20.0	11.0
14	---	---	11.5	8.0			25.0	13.5	22.5	15.0	19.0	9.0
15	---	---	14.0	8.0			26.5	11.5	22.5	16.0	19.0	8.5
16	---	---	13.0	9.0			28.0	13.0	22.0	13.0	20.5	11.5
17	16.5	5.0	12.0	7.5			27.0	13.5	21.5	13.0	19.5	8.5
18	17.0	6.0	14.5	7.5			27.0	15.0	21.5	12.0	19.0	8.0
19	13.5	7.0	15.5	10.0			24.5	14.0	18.5	11.5	18.0	11.5
20	15.5	7.5	16.5	11.5			26.5	13.0	21.0	10.0	19.5	10.5
21	16.0	7.5	18.0	12.5			26.5	13.5	21.5	10.0	14.5	7.5
22	14.5	9.5	18.5	16.5			26.5	14.0	21.0	10.5	16.5	6.5
23	14.5	8.0	17.5	6.5			23.5	15.0	20.5	13.5	16.0	5.5
24	14.5	9.5	14.5	12.0			23.5	14.0	20.5	15.5	17.0	6.0
25	15.5	7.0	12.0	9.5			24.0	14.5	19.5	14.0	16.5	5.5
26	16.5	7.5	14.5	9.0			24.0	13.5	22.5	13.0	17.0	5.5
27	17.0	7.5	15.0	10.5			25.5	14.5	21.0	13.0	17.5	6.5
28	16.0	8.0	16.5	12.0			26.0	14.5	22.0	12.5	17.0	7.0
29	14.0	8.5	---	---			23.5	14.0	20.0	13.0	17.5	7.0
30	14.0	9.5	---	---			25.0	16.0	17.0	10.0	17.5	6.5
31	---	---	---	---			24.5	14.5	16.0	9.5	---	---

BEST DOCUMENT AVAILABLE

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	7.1	19	.36	37	478	48	29	---	20
2	6.9	19	.35	39	600	63	29	---	20
3	6.6	13	.23	38	458	47	29	---	20
4	6.8	53	.98	38	390	40	29	---	20
5	6.8	80	1.5	38	403	41	29	233	18
6	6.7	64	1.2	38	461	47	29	144	11
7	6.5	63	1.1	37	414	41	29	161	13
8	6.3	76	1.3	38	375	38	29	216	17
9	7.1	73	1.4	38	363	37	29	312	24
10	7.2	68	1.3	37	342	34	29	402	31
11	7.7	70	1.4	36	306	30	31	288	24
12	7.6	74	1.5	35	319	30	34	161	15
13	9.1	71	1.7	34	320	30	35	207	20
14	9.8	80	2.1	34	324	30	35	202	19
15	8.8	69	1.6	34	384	35	35	253	24
16	10	64	1.7	34	438	42	35	290	27
17	11	67	1.9	34	363	34	35	356	34
18	11	53	1.5	34	416	42	35	202	19
19	11	28	.88	34	400	42	35	191	18
20	14	130	5.2	34	378	40	35	179	17
21	20	225	12	33	471	42	35	---	15
22	29	362	28	28	229	18	35	---	10
23	35	478	45	28	---	15	35	---	10
24	35	438	41	29	---	10	35	---	10
25	43	---	45	31	---	10	35	---	10
26	43	---	45	33	---	10	35	---	5.0
27	40	---	40	33	100	8.9	35	---	4.8
28	39	420	44	29	251	20	35	---	5.0
29	41	391	43	29	---	20	35	---	5.0
30	42	419	48	29	---	20	35	---	5.0
31	39	422	44	---	---	---	38	---	10
TOTAL	574.0	---	464.20	1023	---	964.9	1023	---	500.8

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	38	---	10	23	---	10	36	704	68
2	38	---	10	23	---	5.0	34	644	59
3	38	---	10	23	---	5.0	34	628	58
4	38	---	10	23	---	5.0	36	663	65
5	38	---	10	23	65	4.0	36	648	63
6	38	---	15	23	---	5.0	37	649	65
7	38	195	20	23	2050	127	39	719	76
8	38	230	24	23	375	23	39	730	77
9	38	275	28	24	---	25	38	634	66
10	38	350	36	25	---	25	38	550	56
11	38	220	23	29	---	25	38	496	52
12	38	180	18	33	---	25	39	506	53
13	38	300	31	37	---	25	37	481	48
14	38	625	64	42	200	23	37	531	53
15	38	1100	113	45	475	58	38	569	59
16	38	2200	226	51	1230	169	41	599	67
17	42	819	96	68	1150	211	36	523	50
18	38	685	72	96	3240	1020	38	537	55
19	36	345	34	111	3660	1170	39	529	56
20	34	275	25	102	2970	876	39	512	54
21	30	325	26	51	1340	186	41	477	52
22	27	725	53	39	739	78	43	647	75
23	27	525	38	35	589	56	39	509	54
24	27	---	30	31	482	41	37	425	43
25	27	---	20	28	460	35	38	550	57
26	27	---	10	31	1230	103	39	740	78
27	27	---	5.0	36	700	70	35	573	55
28	25	---	5.0	45	1320	161	34	520	48
29	23	61	3.8	43	106	12	32	485	42
30	23	---	4.0	---	---	---	31	431	36
31	23	227	14	---	---	---	31	449	37
TOTAL	1044	---	1083.8	1186	---	4578.0	1149	---	1777

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	30	476	38	95	---	600	84	1360	310
2	29	380	30	93	---	600	81	1200	261
3	27	435	31	96	---	600	68	1040	192
4	27	444	32	98	---	600	58	821	129
5	28	386	30	100	2980	670	52	770	108
6	30	---	30	100	3180	870	50	641	87
7	32	---	35	97	---	850	45	544	67
8	33	---	40	117	---	1200	39	432	46
9	34	455	42	135	---	1400	35	313	29
10	36	---	42	144	---	1500	30	398	33
11	37	444	44	143	4080	1580	28	212	16
12	39	745	78	166	3830	1720	23	110	6.9
13	41	---	80	183	3810	1890	21	72	4.2
14	43	---	85	186	3690	1860	18	60	2.9
15	46	---	90	182	3730	1830	15	46	1.8
16	50	---	100	171	3460	1600	20	108	6.1
17	54	736	109	159	---	1200	20	120	6.7
18	58	1460	233	150	2760	1120	17	103	4.8
19	79	3190	694	160	---	1500	13	275	12
20	95	---	1000	155	---	1200	20	158	8.5
21	100	4760	1310	151	2480	1010	17	81	3.8
22	105	---	1400	151	3370	1370	18	84	4.0
23	91	---	1000	146	2670	1060	16	67	2.8
24	79	---	700	149	2400	970	12	58	2.0
25	73	---	500	149	2380	957	12	60	1.9
26	67	---	400	148	2240	893	9.7	78	2.0
27	65	---	380	134	1840	664	7.0	57	1.1
28	64	2140	369	120	1620	526	6.5	57	.99
29	66	---	500	113	1800	586	5.9	47	.75
30	82	2700	598	102	1700	519	5.6	43	.65
31	---	---	---	98	1670	460	---	---	---
TOTAL	1640	---	10020	4191	---	33405	846.7	---	1351.89

BEST DOCUMENT AVAILABLE

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	4.2	---	.50	35	767	73	33	198	18
2	17	---	25	40	412	44	34	181	17
3	43	---	45	40	552	59	30	147	12
4	29	---	30	37	560	56	30	145	12
5	25	322	22	37	463	47	31	135	11
6	21	---	15	38	93	9.6	27	---	10
7	18	---	10	32	---	10	28	203	15
8	21	89	5.0	33	448	40	32	196	17
9	17	102	4.9	32	521	44	22	284	23
10	14	70	2.7	31	469	40	22	296	25
11	13	---	3.0	27	478	35	21	244	19
12	14	---	4.0	23	---	35	21	228	15
13	15	---	6.0	27	---	35	21	246	17
14	17	---	8.0	30	---	33	21	218	14
15	14	182	7.0	34	408	120	22	206	14
16	15	142	6.0	32	---	30	21	179	11
17	18	192	9.3	29	324	25	21	203	12
18	14	114	4.5	27	296	22	20	188	11
19	15	379	15	28	227	17	20	122	7.0
20	21	---	30	29	282	22	20	162	9.4
21	22	---	20	33	286	26	21	146	8.4
22	22	---	10	34	245	23	21	114	6.9
23	21	83	4.7	33	211	19	25	78	5.3
24	27	1460	127	38	273	28	23	69	4.3
25	32	---	50	36	242	24	18	47	2.4
26	33	---	30	37	272	27	16	33	1.4
27	33	298	27	33	190	17	16	39	1.7
28	32	---	20	30	222	18	20	29	1.6
29	29	236	18	29	228	18	21	---	2.0
30	31	234	20	28	200	15	19	---	1.5
31	35	---	40	28	180	14	---	---	---
TOTAL	682.2	---	619.60	1000	---	1025.6	697	---	324.9
YEAR	15055.9		56115.69						

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO

LOCATION.--Lat 39°56'22", long 108°31'56", in SE¼NW¼ sec.5, T.2 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 0.1 mi (0.2 km) downstream from Water Gulch and 19 mi (31 km) southeast of Rangely.

DRAINAGE AREA.--8.61 mi² (22.30 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since Aug. 1, 1976. Prior to Aug. 1, 1976, water-stage recorder at different datum. Altitude of gage is 6,975 ft (2,126 m), from topographic map.

REMARKS.--Records good. This year, 7,250,000 gal (27,450 m³) was pumped from Maverick Draw, above station, by Sun Gas Co. for drilling operation.

AVERAGE DISCHARGE.--6 years, 0.23 ft³/s (0.007 m³/s), 167 acre-ft/yr (0.21 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 272 ft³/s (7.70 m³/s) July 23, 1977, gage height, 3.20 ft (0.975 m); no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.3 ft³/s (0.065 m³/s) at 1030 May 19, gage height, 1.57 ft (0.479 m); no flow Dec. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.41	.36	.20	.15	.06	.06	.08	1.4	1.7	1.0	.74	.68
2	.34	.37	.20	.15	.06	.05	.05	1.4	1.6	1.2	.58	.67
3	.37	.37	.23	.15	.06	.09	.05	1.4	1.5	1.1	.72	.66
4	.50	.37	.22	.13	.06	.09	.05	1.4	1.5	1.1	.71	.70
5	.41	.37	.18	.13	.07	.08	.08	1.3	1.6	.96	.65	.69
6	.37	.37	.18	.12	.07	.06	.05	1.2	1.5	.91	.64	.68
7	.33	.37	.18	.12	.07	.06	.09	1.3	1.5	.97	.64	.62
8	.29	.33	.18	.11	.07	.07	.09	1.4	1.5	.98	.73	.57
9	.26	.29	.18	.11	.07	.08	.13	1.5	1.5	.98	.77	.52
10	.36	.29	.18	.08	.07	.09	.11	1.5	1.5	1.0	.66	.80
11	.36	.28	.18	.12	.07	.12	.14	1.5	1.5	1.1	.56	.59
12	.36	.28	.15	.13	.07	.05	.09	1.5	1.5	1.1	.55	.68
13	.37	.27	.10	.16	.06	.07	.12	1.5	1.4	1.1	.64	.57
14	.38	.26	.08	.18	.05	.10	.14	1.6	1.4	1.1	.63	.72
15	.39	.25	.00	.18	.06	.10	.13	1.6	1.3	1.0	.82	.71
16	.40	.24	.08	.18	.06	.08	.15	1.8	1.3	.97	.76	.70
17	.40	.23	.20	.13	.07	.11	.24	1.9	1.2	1.0	.75	.69
18	.41	.22	.20	.18	.10	.15	.39	2.1	1.3	1.0	.74	.58
19	.41	.17	.23	.11	.12	.09	.13	2.0	1.3	1.0	.68	.53
20	.49	.22	.20	.03	.10	.07	.19	2.0	1.1	.94	.73	.52
21	.40	.22	.20	.18	.08	.08	.19	1.8	1.3	.95	.72	.52
22	.36	.20	.20	.14	.06	.06	.19	1.9	1.3	1.0	.66	.55
23	.36	.22	.20	.14	.09	.06	.42	1.9	1.3	.99	.90	.59
24	.36	.22	.18	.10	.10	.06	.27	1.9	1.1	.98	.87	.63
25	.36	.22	.18	.10	.11	.05	.29	1.9	1.0	.85	.89	.57
26	.35	.22	.16	.10	.16	.04	.43	1.8	1.1	.86	.78	.48
27	.35	.22	.16	.09	.22	.07	.80	1.7	1.1	.78	.77	.52
28	.35	.22	.16	.08	.23	.06	.95	1.7	1.1	.77	.76	.42
29	.31	.22	.16	.08	.09	.05	.94	1.7	1.0	.87	.81	.38
30	.34	.20	.16	.08	---	.05	1.4	1.7	.98	.76	.74	.37
31	.34	---	.16	.06	---	.07	---	1.7	---	.75	.68	---
TOTAL	11.49	8.03	5.27	3.83	2.56	2.32	8.38	51.0	39.98	30.05	22.28	17.91
MEAN	.37	.27	.17	.12	.088	.075	.28	1.65	1.33	.97	.72	.60
MAX	.50	.37	.23	.18	.23	.15	1.4	2.1	1.7	1.2	.90	.80
MIN	.26	.17	.00	.03	.05	.04	.05	1.2	.98	.75	.55	.37
AC-FT	23	16	10	7.6	5.1	4.6	17	101	79	60	44	36

CAL YR 1979 TOTAL 122.30 MEAN .34 MAX 1.4 MIN .00 AC-FT 243
WTR YR 1980 TOTAL 203.29 MEAN .55 MAX 2.1 MIN .00 AC-FT 403

BEST DOCUMENT AVAILABLE

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler since October 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,880 micromhos Oct. 25, 1978; minimum, 230 micromhos Mar. 20, 1978.
WATER TEMPERATURES: Maximum, 31.0°C July 13, 1978; minimum, freezing point many days during winter months each year.
SEDIMENT CONCENTRATIONS: Maximum daily, 16,000 mg/L estimated Apr. 1, 1976; no flow many days during 1974-78.
SEDIMENT LOADS: Maximum daily, 162 tons (147 t) May 20, 1979; no flow many days during 1974-78, Dec. 15, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,260 micromhos Jan. 11; minimum, 580 micromhos Apr. 18.
WATER TEMPERATURES: Maximum, 26.0°C July 22, Aug. 7; minimum, 0.0° several days during November to April.
SEDIMENT CONCENTRATIONS: Maximum daily, 5,120 mg/L Aug. 25; minimum daily, 5 mg/L July 26.
SEDIMENT LOADS: Maximum daily, 21 tons (19 t) May 19; minimum daily, no flow Dec. 15.

WATER QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN, DISSOLV (MG/L AS N)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)
OCT 22...	0945	.26	1000	8.4	3.0	--	10.6	--	--	--	--
JAN 31...	1000	.05	1160	8.4	.0	--	--	--	--	--	--
FEB 19...	1415	.23	680	8.3	4.5	--	--	--	--	--	--
MAY 07...	1019	1.3	1050	8.3	9.5	250	--	3.3	88	1.6	K25
SEP 17...	1210	.58	1100	7.9	16.5	2.6	8.1	1.6	21	1.1	K1200

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT 22...	--	380	140	59	57	86	1.9	1.1	240	--	280
JAN 31...	--	530	170	100	68	67	1.3	1.0	360	--	280
FEB 19...	--	260	65	51	31	51	1.4	3.5	190	--	160
MAY 07...	K92	460	170	90	56	66	1.3	1.0	290	.3	250
SEP 17...	120	450	130	84	58	85	1.8	1.2	320	.0	300

K BASED ON NON-IDEAL COLONY COUNT.

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	BROMIDE DISSOLVED (MG/L AS BR)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 105 DEG. C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
OCT										
22...	3.7	.3	--	21	--	659	.90	.46	--	1.0
JAN										
31...	6.5	.3	--	21	--	766	1.0	.10	--	1.2
FEB										
19...	6.9	.2	--	11	--	433	.59	.27	--	.92
MAY										
07...	4.9	.3	.10	23	737	675	.92	2.3	1110	2.2
SEP										
17...	7.9	.4	.00	21	764	759	1.0	1.1	17	1.1

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ANTIMONY, TOTAL (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
OCT										
22...	--	--	--	--	--	--	100	--	--	5.9
JAN										
31...	--	--	--	--	--	--	100	--	--	13
FEB										
19...	--	--	--	--	--	--	130	--	--	17
MAY										
07...	.030	1.1	1.1	.020	1	5	80	.0	5	11
SEP										
17...	.010	.50	.51	.010	0	5	140	.0	4	12

DATE	TIME	GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)
MAY											
07...	1019	5.4	67	8.0	99	< 4.7	64	< 4.7	62	.10	6.4
SEP											
17...	1210	< 5.8	2.0	< 8.5	2.9	< 4.5	.6	< 4.2	.6	.09	5.7

DATE	TIME	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)
MAY										
07...	1019	.00	2	.00	.00	.00	.00	.00	.00	.00
SEP										
17...	1210	.01	1	.00	.00	.00	.00	.00	.00	.00

DATE	DIELDRIN TOTAL (UG/L)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)
MAY										
07...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP										
17...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

BEST DOCUMENT AVAILABLE

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	METHYL TRI-THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
MAY										
07...	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
SEP										
17...	.00	.00	.00	.00	.00	0	.00	.00	.00	.00

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
FEB				
18...	1120	.13	3230	1.1
18...	1135	.13	4000	1.4
19...	1415	.23	4320	2.7
20...	1425	--	244	--
21...	1105	--	164	--

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
APR				
22...	1330	.18	4410	2.1
MAY				
01...	1635	1.1	4260	13
22...	1019	1.7	2340	11

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1080	1100	1090	1120		---	1040	1110	1160	1120	1090
2	---	1020	1100	1130	1110		---	---	1090	1170	1120	1100
3	---	1020	1120	1100	1100		---	---	1110	1160	1130	1100
4	---	1010	1130	1070	1100		---	---	1120	1110	1130	1100
5	1070	1010	1120	1080	1120		---	---	1130	1100	1130	1100
6	1020	1020	1110	1040	---		---	---	1140	1100	1140	1100
7	---	1040	1100	1010	---		---	---	1150	1110	1140	1090
8	---	1080	1100	1090	---		---	---	1160	1120	1140	1090
9	---	1020	1120	1120	---		---	---	1170	1130	1130	1090
10	---	1030	1130	1140	---		---	---	1140	1090	1130	1080
11	---	1060	1140	1220	---		---	---	1130	1120	1130	1110
12	1070	1110	1110	1180	1100		---	---	1120	1130	1130	1120
13	1070	1150	1080	1150	---		---	1100	1120	1150	1120	1120
14	1070	1090	1030	1140	---		---	---	1120	1060	1120	1120
15	1050	1090	---	1150	---		---	---	1120	1020	1120	1120
16	1040	1070	1050	1150	---		1050	---	1120	1050	1110	1110
17	1040	1060	1080	1110	---		926	---	1120	1100	1110	1120
18	---	1040	1110	1100	---		799	---	1110	1130	1110	1120
19	---	1040	1110	---	---		758	1090	1120	1150	1100	1110
20	---	1070	1090	---	1080		802	---	1120	1140	1110	1110
21	---	1050	1090	---	---		864	---	1120	1170	1120	1110
22	---	1100	1090	---	---		1020	---	1120	1140	1120	1110
23	---	1090	1090	---	---		1030	941	1120	1160	1100	1120
24	---	1060	1090	---	---		1060	899	1120	1180	1140	1130
25	---	1070	1100	---	---		1060	---	1130	1140	1090	1130
26	---	1060	1100	---	---		1050	---	1140	1140	1130	1120
27	---	1080	1100	---	---		1020	---	1140	1140	1150	1120
28	---	1100	1100	---	---		990	1100	1140	1140	1140	1110
29	---	1100	1120	---	---		---	1110	1150	1140	1130	1120
30	---	1080	1090	---	---		---	1100	1150	1130	1120	1120
31	---	---	1090	1110	---		---	1110	---	1130	1100	---

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.5	4.5	5.0	.5	2.0	.0	3.0	1.0	3.0	1.0		
2	19.0	5.5	5.5	.5	3.0	.5	2.5	.0	4.0	1.5		
3	17.5	4.0	6.5	.5	4.0	2.0	2.5	.0	4.5	2.0		
4	18.5	3.0	7.0	1.0	4.0	1.0	4.0	1.0	4.5	2.0		
5	18.5	3.5	6.5	.5	3.0	.5	2.5	.0	3.5	.5		
6	18.5	4.0	7.0	.0	3.5	.0	.5	.0	4.0	1.5		
7	19.0	4.0	6.5	1.5	4.5	1.0	.5	.0	---	---		
8	18.0	3.5	7.5	1.0	5.0	1.5	2.5	.5	---	---		
9	16.0	3.0	7.0	1.0	3.5	.5	3.0	.5	---	---		
10	18.0	3.0	4.5	.0	3.0	.5	3.0	.5	---	---		
11	16.5	3.5	5.5	.0	1.5	.0	2.0	.0	3.5	.5		
12	16.0	4.0	3.5	.0	.5	.0	2.5	2.0	2.0	1.5		
13	17.0	4.0	4.0	.0	1.0	.0	2.5	1.5	---	---		
14	11.5	4.5	4.0	.0	2.5	.0	5.0	2.0	---	---		
15	15.5	3.0	4.0	.0	---	---	6.0	1.5	---	---		
16	14.5	3.5	4.0	.0	3.5	.5	5.0	.5	---	---		
17	13.5	2.5	4.5	.0	3.0	.0	5.5	.0	---	---		
18	14.5	4.0	5.5	.5	2.5	.0	4.5	.5	3.5	1.5		
19	14.5	6.0	3.5	.0	2.5	.0	2.0	.0	6.5	1.0		
20	7.5	.5	3.5	.0	3.5	.5	---	---	6.0	1.5		
21	8.5	.5	2.5	.0	4.0	1.0	---	---	7.0	1.5		
22	10.0	.5	.0	.0	3.5	2.0	---	---	---	---		
23	12.0	1.5	3.0	.0	2.5	.0	---	---	---	---		
24	12.5	1.5	3.5	.0	3.0	.0	---	---	---	---		
25	12.5	2.0	2.0	1.0	2.5	.0	---	---	---	---		
26	12.5	3.0	2.5	.0	3.0	.0	---	---	---	---		
27	10.0	1.0	.5	.0	2.0	.5	---	---	---	---		
28	10.0	.5	1.5	.0	3.0	1.0	---	---	---	---		
29	3.5	.5	1.0	.0	1.5	.0	---	---	.0	.0		
30	4.0	.5	.5	.0	.5	.0	---	---	---	---		
31	3.5	.5	---	---	1.0	.0	3.0	.0	---	---		

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	19.5	6.5	17.5	7.0	23.5	9.0	24.5	8.5	20.0	5.0
2	---	---	16.0	5.5	19.0	7.0	17.0	9.0	25.0	8.0	21.0	6.0
3	---	---	16.5	5.5	20.0	7.0	23.5	8.0	23.5	7.5	21.0	6.0
4	---	---	18.5	7.0	20.5	7.5	24.0	8.0	23.5	6.5	21.5	6.5
5	---	---	20.5	7.5	20.5	7.0	24.0	7.0	25.0	7.0	22.0	6.5
6	---	---	22.0	9.0	20.5	7.0	24.5	7.0	25.0	8.0	21.0	8.0
7	---	---	19.0	9.5	20.5	7.0	18.5	8.0	26.0	8.0	18.5	8.0
8	---	---	17.0	10.5	20.5	7.5	23.0	8.5	24.5	8.0	18.5	8.0
9	---	---	17.0	9.0	22.0	7.0	24.0	8.0	22.0	8.5	12.5	8.0
10	---	---	16.5	7.5	22.0	7.5	22.5	8.5	24.5	7.5	17.5	7.0
11	---	---	12.0	7.5	21.5	7.0	23.5	8.5	25.0	5.5	17.0	6.0
12	---	---	10.5	6.0	21.0	7.0	21.0	8.5	24.5	6.5	18.0	6.5
13	---	---	14.0	6.0	21.0	6.0	21.5	9.0	24.5	8.0	20.0	6.5
14	---	---	---	---	20.5	6.5	24.0	8.0	23.5	8.5	16.5	5.5
15	---	---	---	---	20.5	6.0	24.5	7.0	21.5	8.5	19.5	5.0
16	21.0	.5	---	---	21.5	5.5	25.0	7.5	23.0	7.0	19.0	6.5
17	23.0	.0	---	---	21.5	7.0	25.0	7.5	23.0	6.5	19.0	5.0
18	22.0	.5	---	---	22.0	7.5	23.5	8.0	22.5	6.5	19.0	5.0
19	23.0	1.5	17.5	6.5	19.0	8.0	23.0	8.5	19.0	6.0	18.5	7.5
20	22.5	2.5	16.5	6.5	23.0	7.5	25.5	7.5	22.0	5.0	19.0	5.5
21	21.5	4.0	18.0	6.5	22.5	7.5	25.0	7.5	23.0	5.5	17.0	4.5
22	20.5	5.5	---	---	22.5	7.5	26.0	8.0	23.5	6.0	17.0	3.0
23	19.5	5.5	17.5	6.5	20.5	7.0	25.0	9.0	23.0	8.0	16.5	3.0
24	14.5	5.0	15.0	5.5	23.0	7.5	16.5	8.5	18.0	9.0	17.0	3.5
25	21.5	2.5	---	---	23.5	7.5	23.0	9.0	17.5	8.0	17.5	3.5
26	21.5	2.5	---	---	23.5	8.5	25.0	7.0	22.0	6.5	18.0	4.0
27	21.5	3.5	---	---	22.5	7.5	25.0	7.5	21.0	6.5	18.0	4.0
28	22.5	5.0	18.5	6.5	23.0	6.0	25.5	7.5	21.0	6.5	18.0	4.5
29	---	---	17.0	7.0	21.0	7.0	23.0	8.0	18.5	6.5	17.5	4.5
30	---	---	19.5	7.5	24.0	9.5	25.5	8.5	19.5	6.0	18.0	4.5
31	---	---	19.0	6.0	---	---	23.0	8.0	19.0	5.5	---	---

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.41	78	.09	.36	534	.50	.20	---	.04
2	.34	58	.05	.37	---	.50	.20	---	.05
3	.37	50	.05	.37	---	.50	.20	---	.05
4	.50	90	.12	.37	---	.40	.20	105	.06
5	.41	28	.03	.37	---	.50	.18	---	.04
6	.37	1660	2.0	.37	---	.50	.18	36	.02
7	.33	---	.10	.37	---	.20	.18	---	.02
8	.29	---	.05	.33	67	.06	.18	---	.02
9	.26	---	.06	.29	---	.05	.18	---	.01
10	.36	---	1.0	.29	---	.40	.18	---	.01
11	.36	---	.15	.28	---	.30	.18	---	.01
12	.36	115	.11	.28	---	.30	.15	24	.01
13	.37	---	.10	.27	---	.30	.10	---	.01
14	.38	---	.11	.26	427	.29	.08	---	.01
15	.39	---	.13	.25	---	.30	.00	---	.00
16	.40	---	.14	.24	451	.30	.08	---	.01
17	.40	152	.16	.23	---	.30	.20	---	.01
18	.41	---	.18	.22	---	.30	.20	48	.02
19	.41	---	.19	.17	---	.20	.23	---	.02
20	.49	---	.20	.22	---	.20	.20	---	.02
21	.40	---	.22	.22	308	.20	.20	---	.02
22	.36	248	.23	.20	---	.20	.20	---	.02
23	.36	---	.25	.22	---	.20	.20	---	.01
24	.36	---	.27	.22	---	.10	.18	---	.01
25	.36	---	.29	.22	---	.10	.18	---	.01
26	.35	---	.31	.22	---	.05	.16	---	.01
27	.35	---	.34	.22	27	.02	.16	23	.01
28	.35	---	.37	.22	---	.02	.16	---	.01
29	.31	---	.41	.22	---	.02	.16	---	.01
30	.34	---	.44	.20	---	.03	.16	---	.01
31	.34	---	.47	---	---	---	.16	---	.01
TOTAL	11.49	---	8.62	8.07	---	7.34	5.22	---	0.57

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.16	---	.01	.06	---	.01	.06	---	.06
2	.16	33	.01	.06	---	.01	.05	---	.06
3	.16	---	.01	.06	---	.01	.09	---	.06
4	.13	28	.01	.06	---	.01	.09	---	.06
5	.13	---	.01	.07	45	.01	.08	348	.07
6	.12	---	.01	.07	---	.01	.06	---	.10
7	.12	---	.01	.07	---	.01	.06	---	.10
8	.11	---	.02	.07	---	.01	.07	---	.10
9	.11	---	.03	.07	---	.01	.08	---	.20
10	.08	205	.04	.07	---	.01	.09	---	.20
11	.12	---	.04	.07	---	.01	.12	854	.23
12	.13	---	.04	.07	55	.01	.05	---	.20
13	.16	---	.03	.06	17	.00	.07	---	.20
14	.18	---	.03	.05	---	.01	.10	---	.20
15	.18	---	.03	.06	---	.01	.10	---	.20
16	.18	---	.02	.06	---	.01	.08	---	.15
17	.13	---	.02	.07	---	.05	.11	---	.15
18	.18	---	.02	.10	2360	.67	.15	427	.14
19	.11	---	.02	.12	3750	1.1	.09	---	.10
20	.03	---	.02	.10	240	.06	.07	---	.10
21	.18	---	.02	.08	200	.04	.08	---	.10
22	.14	---	.01	.06	---	.04	.06	---	.05
23	.14	---	.01	.09	---	.04	.06	---	.05
24	.10	---	.01	.10	---	.05	.06	---	.05
25	.10	---	.01	.11	---	.05	.05	84	.01
26	.10	---	.01	.16	---	.05	.04	---	.01
27	.09	---	.01	.22	---	.05	.07	---	.01
28	.08	---	.01	.23	---	.05	.06	---	.01
29	.08	---	.01	.09	---	.05	.05	---	.01
30	.08	---	.01	---	---	---	.05	---	.05
31	.06	33	.01	---	---	---	.07	---	.05
TOTAL	3.83	---	0.55	2.56	---	2.45	2.32	---	3.08

BEST DOCUMENT AVAILABLE

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	.08	302	.07	1.4	3890	13	1.7	198	.91
2	.05	---	.05	1.4	---	10	1.6	206	.89
3	.05	---	.05	1.4	---	10	1.5	183	.74
4	.05	---	.05	1.4	---	10	1.5	142	.58
5	.08	---	.15	1.3	1720	5.6	1.6	104	.45
6	.05	---	.05	1.2	---	7.0	1.5	72	.29
7	.09	---	.15	1.3	2410	8.5	1.5	63	.26
8	.09	2190	.41	1.4	---	10	1.5	47	.19
9	.13	---	1.0	1.5	---	10	1.5	66	.27
10	.11	---	.25	1.5	---	10	1.5	84	.34
11	.14	---	.35	1.5	---	10	1.5	104	.42
12	.09	---	.15	1.5	---	10	1.5	63	.26
13	.12	---	.25	1.5	2920	10	1.4	54	.20
14	.14	---	.35	1.6	4320	16	1.4	35	.13
15	.13	251	.08	1.6	---	15	1.3	56	.20
16	.15	361	.12	1.8	---	15	1.3	48	.17
17	.24	---	.80	1.9	---	15	1.2	77	.25
18	.39	---	1.5	2.1	---	20	1.3	78	.27
19	.13	---	.35	2.0	4800	21	1.3	69	.24
20	.19	---	.50	2.0	---	20	1.1	71	.21
21	.19	---	.50	1.8	---	10	1.3	50	.18
22	.19	4860	2.5	1.9	2230	9.4	1.3	42	.15
23	.42	---	2.0	1.9	2000	8.6	1.3	49	.17
24	.27	---	.90	1.9	1380	6.0	1.1	46	.14
25	.29	---	1.0	1.9	1170	5.2	1.0	43	.12
26	.43	---	2.0	1.8	731	3.2	1.1	27	.08
27	.80	---	4.5	1.7	607	2.6	1.1	30	.09
28	.95	---	6.0	1.7	498	2.1	1.1	41	.12
29	.94	---	6.0	1.7	491	2.0	1.0	33	.09
30	1.4	3520	13	1.7	308	1.2	.98	36	.10
31	---	---	---	1.7	244	.99	---	---	---
TOTAL	8.38	---	45.08	51.0	---	297.39	39.98	---	8.51

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	1.0	196	.53	.74	9	.02	.68	53	.10
2	1.2	198	.70	.58	11	.02	.67	78	.14
3	1.1	35	.10	.72	9	.02	.66	177	.32
4	1.1	39	.12	.71	10	.02	.70	99	.19
5	.96	30	.08	.65	21	.04	.69	130	.23
6	.91	40	.10	.64	23	.04	.68	115	.21
7	.97	40	.10	.64	43	.07	.62	48	.08
8	.98	36	.10	.73	32	.06	.57	33	.05
9	.98	12	.03	.77	23	.05	.52	31	.04
10	1.0	19	.05	.66	13	.02	.80	80	.11
11	1.1	8	.02	.56	15	.02	.59	62	.10
12	1.1	10	.03	.55	17	.03	.68	55	.10
13	1.1	16	.05	.64	16	.03	.57	44	.07
14	1.1	18	.05	.63	13	.02	.72	73	.14
15	1.0	18	.05	.82	34	.08	.71	41	.08
16	.97	11	.03	.76	14	.03	.70	75	.14
17	1.0	8	.02	.75	9	.02	.69	53	.10
18	1.0	12	.03	.74	18	.04	.58	50	.08
19	1.0	12	.03	.68	17	.03	.53	37	.05
20	.94	12	.03	.73	17	.03	.52	27	.04
21	.95	12	.03	.72	16	.03	.52	45	.06
22	1.0	9	.02	.66	13	.02	.55	44	.07
23	.99	10	.03	.90	2560	9.3	.59	38	.06
24	.98	12	.03	.87	265	.63	.63	46	.08
25	.85	13	.03	.89	5120	15	.57	32	.05
26	.84	5	.01	.78	1000	2.1	.48	31	.04
27	.78	8	.02	.77	344	.72	.52	34	.05
28	.77	9	.02	.76	186	.38	.42	16	.02
29	.87	15	.04	.81	120	.26	.38	11	.01
30	.76	11	.02	.74	121	.24	.37	14	.01
31	.75	6	.01	.68	95	.17	---	---	---
TOTAL	30.05	---	2.51	22.28	---	29.54	17.91	---	2.82
YEAR	203.09		408.46						

09306237 DRY FORK NEAR RANGELY, CO

LOCATION.--Lat 39°55'20", long 108°31'55", in SE¼NE¼ sec.32, T.1 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050007, on left bank 1.7 mi (2.7 km) upstream from mouth and 18 mi (29 km) southeast of Rangely.

DRAINAGE AREA.--2.74 mi^2 (7.10 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

REVISED RECORDS.--WDR CO-78-3: 1978(M).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,030 ft (2,141 m), from topographic map.

REMARKS.--Records good, except those for days of flow, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 202 ft^3/s (5.72 m^3/s) July 23, 1977, gage height, 3.16 ft (0.963 m), from slope-area measurement of peak flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.0 ft^3/s (0.085 m^3/s) at 0400 Aug. 25, gage height, 1.90 ft (0.579 m); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.33	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.15	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.37	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.23	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	.05	.29	.00	.33	.60	.00
MEAN	.000	.000	.000	.000	.000	.000	.002	.009	.000	.011	.019	.000
MAX	.00	.00	.00	.00	.00	.00	.05	.15	.00	.33	.37	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.10	.6	.00	.7	1.2	.00

CAL YR 1979 TOTAL 0.09 MEAN .000 MAX .08 MIN .00 AC-FT .2
WTR YR 1980 TOTAL 1.27 MEAN .003 MAX .37 MIN .00 AC-FT 2.5

BEST DOCUMENT AVAILABLE

09306240 BOX ELDER GULCH NEAR RANGELY, CO

LOCATION.--Lat 39°53'18", long 108°31'40", in NE¼SW¼ sec.8, T.2 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 30 ft (9 m) upstream from unnamed tributary, 4.1 mi (6.6 km) upstream from mouth, and 20 mi (32 km) southeast of Rangely.

DRAINAGE AREA.--9.21 mi² (23.85 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,955 ft (2,120 m), from topographic map.

REMARKS.--Records good. No diversion or regulation above station.

AVERAGE DISCHARGE.--5 years, 0.27 ft³/s (0.008 m³/s), 196 acre-ft/yr (0.24 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30 ft³/s (0.85 m³/s) Aug. 25, 1977, gage height, 2.33 ft (0.710 m); no flow most days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9.3 ft³/s (0.236 m³/s) at 0030 May 17, gage height, 1.95 ft (0.594 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	3.3	2.8	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	3.7	2.4	.01	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	3.8	2.6	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	4.2	2.4	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	3.8	2.3	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	3.8	2.0	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	4.5	1.8	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	5.0	1.4	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	5.6	1.1	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	6.1	.87	.00	.00	.08
11	.00	.00	.00	.00	.00	.00	.00	6.8	1.0	.00	.00	.05
12	.00	.00	.00	.00	.00	.00	.00	6.6	.86	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	6.8	.80	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	7.0	.80	.00	.00	.00
15	.00	.00	.00	.00	.02	.00	.00	7.6	.79	.00	.00	.00
16	.00	.00	.00	.00	.05	.00	.00	7.3	.52	.00	.00	.00
17	.00	.00	.00	.00	.05	.00	.00	8.2	.58	.00	.00	.00
18	.00	.00	.00	.00	.10	.00	.30	7.6	.45	.00	.00	.00
19	.00	.00	.00	.00	.12	.00	.70	6.5	.42	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	1.5	6.7	.30	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	2.0	6.2	.28	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	2.0	6.7	.26	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	2.4	7.2	.22	.00	.06	.00
24	.00	.00	.00	.00	.00	.00	2.6	6.9	.19	.00	.01	.00
25	.00	.00	.00	.00	.00	.00	2.9	6.4	.24	.00	.08	.00
26	.00	.00	.00	.00	.00	.00	2.6	6.1	.18	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	2.9	5.9	.14	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	3.0	4.7	.12	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	3.0	4.3	.06	.00	.00	.00
30	.00	.00	.00	.00	---	.00	3.2	3.7	.01	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	3.6	---	.00	.00	---
TOTAL	.00	.00	.00	.00	.34	.00	29.10	176.6	27.89	.01	.15	.13
MEAN	.000	.000	.000	.000	.012	.000	.97	5.70	.93	.000	.005	.004
MAX	.00	.00	.00	.00	.12	.00	3.2	8.2	2.8	.01	.08	.08
MIN	.00	.00	.00	.00	.00	.00	.00	3.3	.01	.00	.00	.00
AC-FT	.00	.00	.00	.00	.7	.00	58	350	55	.02	.3	.3

CAL YR 1979 TOTAL 129.89 MEAN .36 MAX 3.5 MIN .00 AC-FT 258
WTR YR 1980 TOTAL 234.22 MEAN .64 MAX 8.2 MIN .00 AC-FT 465

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: March 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler since March 1975.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 980 micromhos June 21, 1979; minimum, 202 micromhos Mar. 22, 1978.
WATER TEMPERATURES: Maximum, 32.0°C June 20, 1978, June 29, 1979; minimum, 0.0°C Mar. 21-23, 1978, Apr. 20, May 7, 1979, Feb. 17, 18, Apr. 19, 1980.
SEDIMENT CONCENTRATIONS: Maximum daily, 15,800 mg/L Aug. 23, 1980; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 62 tons (56 t) May 19, 1979; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 907 micromhos May 14; minimum, 555 micromhos Apr. 17.
WATER TEMPERATURES: Maximum, 30.0°C June 26; minimum, 0.0°C Feb. 17, 18, Apr. 19.
SEDIMENT CONCENTRATIONS: Maximum daily, 15,800 mg/L Aug. 23; no flow many days during year.
SEDIMENT LOADS: Maximum daily, 54 tons (49 t) May 14; no flow many days during year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN, DISSOLV (MG/L AS N)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)
FEB										
18...	1330	.15	145	6.9	.5	--	10.6	--	--	> 18
APR										
22...	1430	2.1	864	8.1	13.5	540	8.2	1.9	100	3.3
JUN										
10...	1440	.92	815	8.0	24.5	--	6.4	--	--	--

DATE	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)
FEB										
18...	51	0	14	3.8	5.6	.3	--	59	--	4.7
APR										
22...	400	110	79	48	57	1.2	1.0	290	.0	220
JUN										
10...	340	81	59	47	56	1.3	.8	260	--	170

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
FEB										
18...	3.5	.0	--	3.1	--	--	.12	.04	--	.02
APR										
22...	18	.4	.10	22	552	626	.85	3.5	1420	1.3
JUN										
10...	6.1	.2	--	23	--	524	.71	1.3	--	1.3

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ANTIMONY, TOTAL (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
FEB										
18...	--	--	--	--	--	--	400	--	--	30
APR										
22...	.000	.60	.60	.020	1	6	90	.0	5	13
JUN										
10...	--	--	--	--	--	--	80	--	--	10

DATE	TIME	GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)
APR											
22...	1430	< 4.3	52	< 6.3	76	< 4.1	65	< 4.1	64	.12	4.4

DATE	TIME	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)
APR										
22...	1430	.00	4	.00	.00	.00	.00	.00	.00	.00

DATE	DIELDRIN TOTAL (UG/L)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)
APR										
22...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	METHYL TRITHION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
APR										
22...	.00	.00	.00	.00	.00	0	.00	.00	.00	.00

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---		---	---	810			
2					---		---	---	807			
3					---		---	---	819			
4					---		---	---	820			
5					---		---	---	820			
6					---		---	---	828			
7					---		---	855	816			
8					---		---	865	815			
9					---		---	868	820			
10					---		---	862	814			
11					---		---	839	825			
12					---		---	854	813			
13					---		---	859	816			
14					---		---	870	815			
15					---		---	850	808			
16					---		---	800	780			
17					---		---	---	780			
18					160		584	---	776			
19					150		687	855	802			
20					---		776	823	830			
21					---		830	816	820			
22					---		840	833	820			
23					---		770	835	818			
24					---		725	840	819			
25					---		820	834	---			
26					---		760	830	815			
27					---		---	831	---			
28					---		---	840	---			
29					---		---	---	---			
30					---		---	826	---			
31					---		---	810	---			

09306763 BOX ELDER GULCH NEAR RANGELY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1									---	---		
2									---	---		
3									---	---		
4									---	---		
5									---	---		
6									---	---		
7									---	---		
8									---	---		
9									---	---		
10									---	---		
11									---	---		
12									---	---		
13									---	---		
14									---	---		
15									---	---		
16									---	---		
17									---	---		
18									.5	.0		
19									.5	.0		
20									---	---		
21									---	---		
22									---	---		
23									---	---		
24									---	---		
25									---	---		
26									---	---		
27									---	---		
28									---	---		
29									---	---		
30									---	---		
31									---	---		

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	14.0	5.0	16.0	3.5						
2	---	---	14.0	4.0	18.5	3.0						
3	---	---	14.0	4.0	20.5	5.0						
4	---	---	15.0	5.5	20.5	5.0						
5	---	---	15.0	5.5	21.0	4.5						
6	---	---	17.0	5.5	21.0	4.5						
7	---	---	13.0	6.5	22.0	4.0						
8	---	---	13.5	6.5	23.0	4.0						
9	---	---	15.0	5.5	25.5	5.0						
10	---	---	13.5	6.0	25.5	5.0						
11	---	---	10.5	5.5	24.5	5.0						
12	---	---	9.5	4.0	24.0	6.0						
13	---	---	12.5	4.5	24.0	5.5						
14	---	---	12.0	5.0	23.5	5.0						
15	---	---	12.5	5.5	25.5	4.0						
16	---	---	13.5	5.5	26.5	9.0						
17	---	---	10.0	4.5	27.5	5.5						
18	3.0	.5	16.0	4.5	28.0	7.0						
19	19.0	.0	16.0	5.0	22.0	9.0						
20	21.0	1.5	15.0	5.0	28.0	7.0						
21	17.5	1.5	18.0	7.5	28.0	7.0						
22	17.0	3.0	15.0	5.5	29.0	7.0						
23	15.0	3.0	17.0	5.5	23.5	6.0						
24	10.5	3.0	13.0	4.5	28.5	6.5						
25	18.5	1.0	10.5	4.5	---	---						
26	16.5	1.5	16.5	3.0	30.0	8.0						
27	16.5	2.0	16.5	4.0	---	---						
28	16.0	3.0	18.0	4.0	---	---						
29	13.5	6.5	---	---	---	---						
30	11.5	5.5	19.0	3.0	---	---						
31	---	---	17.0	3.0	---	---						

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.00			.00	---	---	.00		
2	.00			.00	---	---	.00		
3	.00			.00	---	---	.00		
4	.00			.00	---	---	.00		
5	.00			.00	---	---	.00		
6	.00			.00	---	---	.00		
7	.00			.00	---	---	.00		
8	.00			.00	---	---	.00		
9	.00			.00	---	---	.00		
10	.00			.00	---	---	.00		
11	.00			.00	---	---	.00		
12	.00			.00	---	---	.00		
13	.00			.00	---	---	.00		
14	.00			.00	---	---	.00		
15	.00			.02	---	.00	.00		
16	.00			.05	---	.00	.00		
17	.00			.05	---	.01	.00		
18	.00			.10	63	.02	.00		
19	.00			.12	42	.01	.00		
20	.00			.00	---	---	.00		
21	.00			.00	---	---	.00		
22	.00			.00	---	---	.00		
23	.00			.00	---	---	.00		
24	.00			.00	---	---	.00		
25	.00			.00	---	---	.00		
26	.00			.00	---	---	.00		
27	.00			.00	---	---	.00		
28	.00			.00	---	---	.00		
29	.00			.00	---	---	.00		
30	.00			---	---	---	.00		
31	.00			---	---	---	.00		
TOTAL	0.00			0.34	---	0.04	0.00		

BEST DOCUMENT AVAILABLE

GREEN RIVER BASIN

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	.01	---	---	3.1	1650	15	2.8	69	.51
2	.00	---	---	3.7	1810	18	2.9	42	.27
3	.00	---	---	3.8	2050	21	2.6	42	.29
4	.00	---	---	4.2	2410	28	2.5	23	.14
5	.00	---	---	3.8	2560	27	2.3	29	.18
6	.00	---	---	4.8	2830	25	2.0	26	.14
7	.00	---	---	4.5	3270	40	1.8	12	.06
8	.00	---	---	4.0	2570	35	1.4	42	.15
9	.00	---	---	4.6	2720	42	1.1	36	.11
10	.00	---	---	6.1	2430	40	.87	41	.10
11	.00	---	---	6.8	2500	46	1.0	18	.06
12	.00	---	---	6.6	2670	48	.86	9	.02
13	.00	---	---	6.8	2490	46	.80	6	.01
14	.00	---	---	7.0	2680	56	.80	5	.01
15	.00	---	---	7.6	---	50	.79	2	.00
16	.00	---	---	7.3	---	50	.52	11	.02
17	.00	---	---	8.2	---	40	.58	16	.02
18	.30	---	1.0	7.6	---	30	.45	---	.02
19	.75	---	5.0	6.5	1390	25	.42	---	.02
20	1.5	---	5.0	6.7	1240	23	.30	---	.02
21	2.0	1830	10	6.2	1020	17	.28	---	.01
22	2.1	1700	10	6.7	794	14	.26	---	.01
23	2.4	1500	10	7.2	785	15	.22	---	.01
24	2.1	1260	9.0	6.9	665	12	.19	21	.01
25	1.9	1110	9.0	6.4	631	11	.24	---	.01
26	1.6	1040	7.0	6.1	366	6.0	.18	16	.01
27	2.4	1130	8.0	4.9	225	3.5	.14	---	.01
28	3.0	1210	10	4.7	166	2.2	.12	---	.01
29	3.0	1290	11	4.1	157	1.9	.06	---	.01
30	3.0	2350	20	3.7	118	1.2	.01	---	.00
31	---	---	---	3.6	67	.65	---	---	---
TOTAL	26.11		115.0	176.6	---	787.55	27.88	---	2.24

BEST DOCUMENT AVAILABLE

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.00		.00	.00	---	.00	.00		---
2	.01		.10	.00	---	.00	.00		---
3	.00		.00	.00	---	.00	.00		---
4	.00		.00	.00	---	.00	.00		---
5	.00		.00	.00	---	.00	.00		---
6	.00		.00	.00	---	.00	.00		---
7	.00		.00	.00	---	.00	.00		---
8	.00		.00	.00	---	.00	.00		---
9	.00		.00	.00	---	.00	.00		---
10	.00		.00	.00	---	.00	.08		7.0
11	.00		.00	.00	---	.00	.05		4.0
12	.00		.00	.00	---	.00	.00		---
13	.00		.00	.00	---	.00	.00		---
14	.00		.00	.00	---	.00	.00		---
15	.00		.00	.00	---	.00	.00		---
16	.00		.00	.00	---	.00	.00		---
17	.00		.00	.00	---	.00	.00		---
18	.00		.00	.00	---	.00	.00		---
19	.00		.00	.00	---	.00	.00		---
20	.00		.00	.00	---	.00	.00		---
21	.00		.00	.00	---	.00	.00		---
22	.00		.00	.00	---	---	.00		---
23	.00		.00	.06	15800	8.6	.00		---
24	.00		.00	.01	---	1.0	.00		---
25	.00		.00	.08	6290	7.7	.00		---
26	.00		.00	.00	---	1.0	.00		---
27	.00		.00	.00	---	---	.00		---
28	.00		.00	.00	---	---	.00		---
29	.00		.00	.00	---	---	.00		---
30	.00		.00	.00	---	---	.00		---
31	.00		.00	.00	---	---	---		
TOTAL	0.01		0.10	0.15	---	18.30	0.13		11.0
YEAR	234.22		935.23						

BEST DOCUMENT AVAILABLE

09306241 BOX ELDER GULCH TRIBUTARY NEAR RANGELY, CO

LOCATION.--Lat 39°54'50", long 108°29'06", in SE¼SE¼ sec.34, T.1 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 880 ft (268 m) above mouth, 3.5 mi (5.6 km) west of 84 Ranch, and 20.5 mi (33.0 km) southwest of Rangely.

DRAINAGE AREA.--2.39 mi² (6.19 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,655 ft (2,028 m), from topographic map.

REMARKS.--Records excellent except for periods of flow, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5.0 ft³/s (0.14 m³/s) Sept. 11, 1977 (slope-area measurement); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3.9 ft³/s (0.110 m³/s) at 1900 Aug. 23, gage height, 1.66 ft (0.506 m); no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.12
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.50	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	1.5	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	1.0	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.24	.00
24	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	.00	.00	.00	.00	3.25	.06	.00	.03	.00	.00	.24	.12
MEAN	.000	.000	.000	.000	.11	.002	.000	.001	.000	.000	.008	.004
MAX	.00	.00	.00	.00	1.5	.01	.00	.03	.00	.00	.24	.12
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	6.4	.1	.00	.06	.00	.00	.5	.2

CAL YR 1979 TOTAL 0.00 MEAN .000 MAX .00 MIN .00 AC-FT .00
WTR YR 1980 TOTAL 3.70 MEAN .010 MAX 1.5 MIN .00 AC-FT 7.3

09306241 BOX ELDER GULCH TRIBUTARY NEAR RANGELY. CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler since October 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum. 422 micromhos. Sept. 11. 1977; minimum. 284 micromhos Sept. 11. 1977.
WATER TEMPERATURES: Maximum not determined; minimum. 0.0°C Feb. 17-21. 1980.
SEDIMENT CONCENTRATIONS. Maximum daily. 10.800 mg/L Feb. 28. 1976; no flow many days each year.
SEDIMENT LOADS: Maximum daily. 44 tons (40 t) Feb. 28. 1976; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Maximum not determined; minimum. 0.0°C Feb. 17-21.
SEDIMENT CONCENTRATIONS: Maximum daily. 1.100 mg/L Feb. 19; no flow many days during year.
SEDIMENT LOADS: Maximum daily. 4.0 tons (3.6 t) Feb. 18; no flow many days during year.

WATER-QUALITY DATA. WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW. INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN. DIS-SOLVED (MG/L)	NITRO-GEN. DISSOLV (MG/L AS N)	OXYGEN DEMAND. CHEM-ICAL (HIGH LEVEL) (MG/L)	HARD-NESS (MG/L AS CACO3)
FEB										
18...	1240	25	130	8.0	.5	640	11.6	1.6	130	62

DATE	HARD-NESS. NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM. DIS-SOLVED (MG/L AS MG)	SODIUM. DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM. DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE. DIS-SOLVED (MG/L AS CL)	FLUO-RIDE. DIS-SOLVED (MG/L AS F)
FEB										
18...	0	20	2.9	7.0	.4	5.5	62	2.2	2.0	.1

DATE	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA. DIS-SOLVED (MG/L AS SIO2)	SOLIDS. RESIDUE AT 105 DEG. C. DIS-SOLVED (MG/L)	SOLIDS. SUM OF CONSTI-TUENTS. DIS-SOLVED (MG/L)	SOLIDS. DIS-SOLVED (TONS PER AC-FT)	SOLIDS. DIS-SOLVED (TONS PER DAY)	SOLIDS. RESIDUE AT 105 DEG. C. SUS-PENDED (MG/L)	NITRO-GEN. NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN. AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN. ORGANIC DIS-SOLVED (MG/L AS N)
FEB										
18...	.00	4.9	128	84	.11	5.6	700	.34	.110	1.2

DATE	NITRO-GEN.AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS. DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON. DIS-SOLVED (UG/L AS B)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM. DIS-SOLVED (UG/L AS SE)	CARBON. ORGANIC DIS-SOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)
FEB									
18...	1.3	.150	2	130	.1	0	30	.00	17

DATE	TIME	STREAM-FLOW. INSTAN-TANEOUS (CFS)	SEDI-MENT. SUS-PENDED (MG/L)	SEDI-MENT. DIS-CHARGE. SUS-PENDED (T/DAY)
FEB				
18...	1240	25	3350	226
18...	1241	25	3020	204
18...	1300	2.5	2850	19
18...	1301	2.5	2870	19
18...	1410	E1.5	3170	--
18...	1411	E1.5	3000	--
19...	1435	E2.0	4340	--
19...	1600	1.6	3160	14
21...	1148	--	7190	--

E ESTIMATED.

09306241 BOX ELDER GULCH TRIBUTARY NEAR RANGELY, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---							
2					---							
3					---							
4					---							
5					---							
6					---							
7					---							
8					---							
9					---							
10					---							
11					---							
12					---							
13					---							
14					---							
15					---							
16					---							
17					---							
18					140							
19					100							
20					200							
21					280							
22					---							
23					---							
24					---							
25					---							
26					---							
27					---							
28					---							
29					---							
30					---							
31					---							

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1									---	---		
2									---	---		
3									---	---		
4									---	---		
5									---	---		
6									---	---		
7									---	---		
8									---	---		
9									---	---		
10									---	---		
11									---	---		
12									---	---		
13									---	---		
14									---	---		
15									---	---		
16									---	---		
17									---	---		
18									.5	.0		
19									.5	.0		
20									.5	.0		
21									.5	.0		
22									---	---		
23									---	---		
24									---	---		
25									---	---		
26									---	---		
27									---	---		
28									---	---		
29									---	---		
30									---	---		
31									---	---		

09306241 BOX ELDER GULCH TRIBUTARY NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.00			.00	---	---	.01		.02
2	.00			.00	---	---	.01		.02
3	.00			.00	---	---	.00		---
4	.00			.00	---	---	.01		.01
5	.00			.00	---	---	.01		.01
6	.00			.00	---	---	.00		---
7	.00			.00	---	---	.00		---
8	.00			.00	---	---	.00		---
9	.00			.00	---	---	.00		---
10	.00			.00	---	---	.01		.01
11	.00			.00	---	---	.00		---
12	.00			.00	---	---	.00		---
13	.00			.00	---	---	.00		---
14	.00			.00	---	---	.01		.01
15	.00			.00	---	---	.00		---
16	.00			.05	---	.02	.00		---
17	.00			.50	---	1.0	.00		---
18	.00			1.5	1000	4.0	.00		---
19	.00			1.0	1100	3.0	.00		---
20	.00			.10	500	.14	.00		---
21	.00			.05	800	.10	.00		---
22	.00			.02	---	.05	.00		---
23	.00			.00	---	---	.00		---
24	.00			.02	---	.05	.00		---
25	.00			.00	---	---	.00		---
26	.00			.00	---	---	.00		---
27	.00			.01	---	.03	.00		---
28	.00			.00	---	---	.00		---
29	.00			.00	---	---	.00		---
30	.00			---	---	---	.00		---
31	.00			---	---	---	.00		---
TOTAL	0.00			3.25	---	8.39	0.06		0.08

09306241 BOX ELDER GULCH TRIBUTARY NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	.00			.00		---	.00		
2	.00			.00		---	.00		
3	.00			.00		---	.00		
4	.00			.00		---	.00		
5	.00			.00		---	.00		
6	.00			.00		---	.00		
7	.00			.00		---	.00		
8	.00			.00		---	.00		
9	.00			.00		---	.00		
10	.00			.00		---	.00		
11	.00			.00		---	.00		
12	.00			.00		---	.00		
13	.00			.00		---	.00		
14	.00			.00		---	.00		
15	.00			.00		---	.00		
16	.00			.00		---	.00		
17	.00			.00		---	.00		
18	.00			.00		---	.00		
19	.00			.00		---	.00		
20	.00			.00		---	.00		
21	.00			.00		---	.00		
22	.00			.00		---	.00		
23	.00			.00		---	.00		
24	.00			.00		---	.00		
25	.00			.00		---	.00		
26	.00			.00		---	.00		
27	.00			.00		---	.00		
28	.00			.00		---	.00		
29	.00			.00		---	.00		
30	.00			.03		.22	.00		
31	---			.00		---	---		
TOTAL	0.00			0.03		0.22	0.00		

BEST DOCUMENT AVAILABLE

09306241 BOA ELDER GULCH TRIBUTARY NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.00			.00		---	.00		---
2	.00			.00		---	.00		---
3	.00			.00		---	.00		---
4	.00			.00		---	.00		---
5	.00			.00		---	.00		---
6	.00			.00		---	.00		---
7	.00			.00		---	.00		---
8	.00			.00		---	.00		---
9	.00			.00		---	.00		---
10	.00			.00		---	.12		.90
11	.00			.00		---	.00		---
12	.00			.00		---	.00		---
13	.00			.00		---	.00		---
14	.00			.00		---	.00		---
15	.00			.00		---	.00		---
16	.00			.00		---	.00		---
17	.00			.00		---	.00		---
18	.00			.00		---	.00		---
19	.00			.00		---	.00		---
20	.00			.00		---	.00		---
21	.00			.00		---	.00		---
22	.00			.00		---	.00		---
23	.00			.24		2.0	.00		---
24	.00			.00		---	.00		---
25	.00			.00		---	.00		---
26	.00			.00		---	.00		---
27	.00			.00		---	.00		---
28	.00			.00		---	.00		---
29	.00			.00		---	.00		---
30	.00			.00		---	.00		---
31	.00			.00		---	---		
TOTAL	0.00			0.24		2.0	0.12		0.90
YEAR	3.70		11.59						

BEST DOCUMENT AVAILABLE

09306242 CORRAL GULCH NEAR RANGELY, CO

LOCATION.--Lat 39°55'13", long 108°28'20", in SE¼NW¼ sec.35, T.1 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 5 ft (2 m) downstream from Boxelder Creek, 3.5 mi (5.6 km) upstream from confluence with Stake Springs Draw, and 21 mi (34 km) southeast of Rangely.

DRAINAGE AREA.--31.6 mi² (81.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since July 20, 1974. Altitude of gage is 6,570 ft (2,003 m), from topographic map.

REMARKS.--Records good. No diversion above station. Flow is not all natural as ground water from mining operations upstream from the gage is included.

AVERAGE DISCHARGE.--6 years, 1.52 ft³/s (0.043 m³/s), 1,100 acre-ft/yr (1.36 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 183 ft³/s (5.18 m³/s) July 23, 1977, gage height, 3.89 ft (1.186 m); minimum daily, 0.06 ft³/s (0.002 m³/s) Apr. 10-14, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18 ft³/s (0.51 m³/s) at 1500 Feb. 18, gage height, 2.52 ft (0.768 m); minimum daily, 0.49 ft³/s (0.014 m³/s) Nov. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	.93	.63	.98	1.0	1.1	1.5	4.3	5.2	2.0	1.6	1.5
2	1.7	1.1	.63	1.0	.99	1.0	1.4	4.9	5.3	2.5	1.5	1.5
3	1.7	.73	.63	1.0	1.0	1.1	1.4	5.1	5.2	2.7	1.5	1.5
4	1.8	.79	.63	1.1	1.0	1.1	1.4	5.0	5.0	2.6	1.4	1.4
5	2.0	.55	.68	1.1	1.0	1.1	1.4	5.7	5.1	2.5	1.7	1.3
6	2.4	.48	.68	1.1	1.1	1.2	1.4	6.0	4.7	2.5	2.3	1.5
7	1.8	.60	.73	1.1	1.1	1.2	1.4	6.6	4.0	2.6	2.2	1.3
8	1.9	.80	.78	1.1	1.1	1.2	1.4	6.8	3.9	2.4	1.9	1.7
9	1.9	.64	.78	1.1	1.1	1.1	1.4	7.5	3.6	2.4	2.5	1.9
10	1.7	.59	.78	1.1	1.1	1.2	1.4	7.7	3.0	2.1	2.0	1.8
11	1.8	.69	.83	1.0	1.1	1.2	1.4	8.4	2.7	2.1	2.0	1.5
12	1.7	.70	.83	1.0	1.1	1.2	1.4	8.6	3.3	2.0	2.0	1.5
13	2.0	.79	.83	.96	1.3	1.2	1.4	8.6	3.4	2.0	1.9	1.4
14	1.8	.70	.83	.96	1.4	1.2	1.4	9.0	3.3	1.9	2.0	1.4
15	1.8	.49	.83	.95	1.2	1.2	1.4	8.7	2.7	1.9	2.0	1.3
16	1.8	.49	.78	.95	1.0	1.3	1.4	9.2	2.7	1.8	1.9	1.4
17	1.7	.49	.73	.95	1.3	1.3	1.4	9.8	2.7	1.7	1.9	1.4
18	1.8	.49	.73	.94	3.5	1.4	1.3	9.1	2.6	1.7	1.8	1.5
19	1.8	.49	.78	1.0	1.9	1.4	1.3	8.0	2.6	1.6	1.7	1.4
20	1.9	.53	.78	1.0	1.1	1.4	1.3	8.4	2.6	1.6	1.4	1.4
21	1.8	.49	.83	1.0	.84	1.4	1.4	8.4	2.7	1.3	1.4	1.4
22	1.8	.50	.83	1.5	.79	1.4	2.3	8.2	2.6	1.4	1.4	1.7
23	1.2	.59	.83	1.4	1.1	1.3	3.0	8.1	2.9	1.4	1.6	1.0
24	1.4	.54	.78	1.2	.90	1.3	3.1	8.2	3.6	1.4	1.6	.99
25	1.9	.58	.78	1.0	.96	1.3	3.0	7.5	3.9	1.5	1.7	.99
26	1.7	.58	.78	1.0	1.0	1.4	3.1	6.0	2.1	1.4	1.6	.94
27	1.5	.59	.78	1.1	1.2	1.4	3.2	6.5	2.1	1.4	1.6	.94
28	1.5	.58	.83	1.1	1.2	1.3	3.4	6.4	2.2	1.4	1.6	.89
29	1.5	.58	.83	1.7	1.0	1.3	4.1	6.3	2.1	1.5	1.6	.89
30	1.6	.63	.93	2.4	---	1.4	4.4	5.6	2.0	1.5	1.6	.89
31	1.4	---	.93	1.0	---	1.4	---	5.2	---	1.5	1.5	---
TOTAL	54.0	18.73	24.03	34.79	34.38	39.0	58.8	223.8	99.8	58.3	54.4	40.23
MEAN	1.74	.62	.78	1.12	1.19	1.26	1.96	7.22	3.33	1.88	1.75	1.34
MAX	2.4	1.1	.93	2.4	3.5	1.4	4.4	9.8	5.3	2.7	2.5	1.9
MIN	1.2	.48	.63	.94	.79	1.0	1.3	4.3	2.0	1.3	1.4	.89
AC-FT	107	37	48	69	68	77	117	444	198	116	108	80

CAL YR 1979 TOTAL 1104.79 MEAN 3.03 MAX 12 MIN .48 AC-FT 2190
WTR YR 1980 TOTAL 740.26 MEAN 2.02 MAX 9.8 MIN .48 AC-FT 1470

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1975 to current year.
WATER TEMPERATURE: January 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1974. Pumping sediment sampler since October 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,000 micromhos July 17, 1976; minimum, 271 micromhos Feb. 18, 1980.
WATER TEMPERATURES: Maximum, 29.0°C Aug. 5, 1979; minimum, 0.0°C on several days during winter months some years.
SEDIMENT CONCENTRATIONS: Maximum daily, 88,000 mg/L estimated Sept. 11, 1977; minimum daily, 4 mg/L Dec. 5, 1977.
SEDIMENT LOADS: Maximum daily, 1,400 tons (1,300 t) estimated Sept. 11, 1977; minimum daily, 0.005 ton (0.005 t) on many days during 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,100 micromhos Sept. 22; minimum, 271 micromhos Feb. 18.
WATER TEMPERATURES: Maximum, 21.5°C Apr. 21, June 10; minimum, 0.5°C Jan. 22.
SEDIMENT CONCENTRATIONS: Maximum daily, 8,260 mg/L Feb. 18; minimum daily, 5 mg/L Nov. 11, 12, 14, 15.
SEDIMENT LOADS: Maximum daily, 170 tons (154 t) Feb. 18; minimum daily, 0.01 ton (0.01 t) many days during November.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	NITROGEN, DISSOLV (MG/L AS N)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)
OCT											
22...	1145	1.7	1460	8.4	14.5	--	8.7	--	--	--	--
NOV											
29...	1350	.59	1480	7.9	6.0	--	10.9	--	--	--	--
DEC											
18...	1110	.79	1600	8.1	4.5	--	8.3	--	--	--	--
JAN											
22...	1017	2.3	1500	7.7	6.5	--	8.3	--	--	--	--
22...	1430	1.1	1420	8.0	.5	--	--	--	--	--	--
FEB											
18...	1430	16	321	7.9	1.5	2000	11.2	1.8	330	> 10	--
MAR											
26...	1100	1.3	1520	7.6	8.0	--	7.6	--	--	--	--
APR											
21...	1415	.84	1550	7.5	12.0	--	7.5	--	--	--	--
MAY											
20...	0900	9.1	1060	7.9	14.0	1000	--	1.9	110	--	K900
JUN											
10...	1530	2.8	1400	7.6	18.0	--	6.6	--	--	1.6	--
JUL											
15...	1220	2.0	1400	8.2	16.0	--	5.6	--	--	--	--
AUG											
19...	1445	1.6	1470	7.5	15.5	--	7.5	--	--	--	--
SEP											
17...	1330	1.6	1550	7.6	17.5	180	6.2	.70	56	2.6	2800

K BASED ON NON-IDEAL COLONY COUNT.

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT											
22...	--	430	0	49	74	180	3.8	.8	450	--	370
NOV											
29...	--	560	81	96	78	150	2.8	1.7	480	--	370
DEC											
18...	--	580	86	97	81	150	2.7	1.7	490	--	380
JAN											
22...	--	490	70	84	68	140	2.8	1.8	420	--	380
22...	--	440	24	64	69	170	3.5	2.4	420	--	380
FEB											
18...	--	110	0	19	14	30	1.3	4.4	110	--	52
MAR											
26...	--	550	83	96	76	160	3.0	1.6	470	--	400
APR											
21...	--	560	71	96	78	170	3.1	1.7	490	--	400
MAY											
20...	K20	410	49	73	55	79	1.7	1.1	360	.3	220
JUN											
10...	--	470	47	75	68	160	3.2	1.2	420	--	330
JUL											
15...	--	480	35	83	65	140	2.8	1.8	440	--	340
AUG											
19...	--	480	2	76	71	180	3.6	1.2	480	--	370
SEP											
17...	900	430	25	62	68	200	4.2	2.4	410	.0	440

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
OCT										
22...	9.5	1.3	--	24	--	980	1.3	4.5	--	.12
NOV										
29...	9.6	.5	--	23	--	1020	1.3	1.6	--	.03
DEC										
18...	9.8	.4	--	22	--	1040	1.4	2.2	--	.08
JAN										
22...	9.6	.4	--	23	--	960	1.3	5.9	--	.15
22...	10	.8	--	26	--	976	1.3	2.9	--	.30
FEB										
18...	4.0	.2	.00	7.5	232	200	.27	8.6	5090	.53
MAR										
26...	12	.0	--	23	--	1050	1.4	3.6	--	.11
APR										
21...	14	.5	--	24	--	1080	1.4	2.4	--	.13
MAY										
20...	6.5	.4	.10	23	729	680	.92	16.7	1820	1.2
JUN										
10...	8.8	.4	--	25	--	922	1.2	6.9	--	.26
JUL										
15...	9.6	.6	--	22	--	927	1.2	5.0	--	.08
AUG										
19...	9.5	.7	--	26	--	1020	1.3	4.4	--	.00
SEP										
17...	30	.9	.00	20	776	1070	1.4	4.6	716	.14

K BASED ON NON-IDEAL COLONY COUNT.

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	ANTI-MONY, TOTAL (UG/L AS SB)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
OCT										
22...	--	--	--	--	--	--	150	--	--	6.8
NOV										
29...	--	--	--	--	--	--	160	--	--	16
DEC										
18...	--	--	--	--	--	--	160	--	--	7.6
JAN										
22...	--	--	--	--	--	--	160	--	--	5.9
22...	--	--	--	--	--	--	160	--	--	22
FEB										
18...	.130	1.2	1.3	.200	--	6	190	.1	0	21
MAR										
26...	--	--	--	--	--	--	160	--	--	20
APR										
21...	--	--	--	--	--	--	170	--	--	26
MAY										
20...	.000	.67	.67	.010	0	6	110	.0	3	15
JUN										
10...	--	--	--	--	--	--	130	--	--	25
JUL										
15...	--	--	--	--	--	--	160	--	--	25
AUG										
19...	--	--	--	--	--	--	180	--	--	12
SEP										
17...	.070	.49	.56	.050	0	7	190	.0	0	5.9

DATE	TIME	GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)
MAY											
20...	0900	88	61	130	90	24	75	23	72	.10	9.8
SEP											
17...	1330	< 8.2	26	< 12	38	< 6.1	28	< 5.7	27	.10	--

DATE	TIME	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)
FEB										
18...	1430	.00	9	--	--	--	--	--	--	--
MAY										
20...	0900	.00	0	.00	.00	.00	.00	.00	< .01	.00
SEP										
17...	1330	.01	3	.00	.00	.00	.00	.00	.00	.00

DATE	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)
FEB										
18...	--	--	--	--	--	--	--	--	--	--
MAY										
20...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
SEP										
17...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

BEST DOCUMENT AVAILABLE

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	METHYL TRI-THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
FEB										
18...	--	--	--	--	--	--	--	--	--	--
MAY										
20...	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
SEP										
17...	.00	.00	.00	.00	.00	0	.00	.00	.00	.00

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
FEB												
18...	1430	16	11100	480	24	51	61	92	98	99	99	100
18...	1515	16	14800	639	--	--	--	86	--	--	--	--
19...	1625	9.0	8690	211	--	--	--	76	--	--	--	--
20...	1615	1.7	1170	5.4	--	--	--	71	--	--	--	--
MAY												
20...	1007	9.1	4160	102	--	--	--	63	--	--	--	--
29...	1318	6.8	1880	35	--	--	--	69	--	--	--	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1420	1400	1440	1580	1510	1520	1510	1250	1250	1530	1450	1350
2	1420	1400	1460	1570	1530	1510	1530	1270	1270	1170	1470	1350
3	1430	1380	1450	---	1540	1510	1530	1280	1320	1370	1470	1360
4	1430	1390	1450	1590	1530	1510	1540	1260	1320	1360	1470	1380
5	1440	1380	1430	1590	1510	1510	1530	1290	1300	1340	1440	1400
6	1440	1390	1410	1560	1500	1510	1530	1330	1290	1330	1470	1350
7	1440	1430	1410	---	1490	1510	1530	1330	1270	1330	1460	1410
8	1430	1430	1420	---	1490	1510	1530	1240	1270	1330	1400	1450
9	1420	---	1420	---	1460	1520	1530	1330	1280	1340	1270	1450
10	1410	---	1410	1610	1450	1520	1540	1320	1240	1340	946	1410
11	1400	---	1410	1610	1470	1510	1540	1330	1230	1350	1450	1420
12	1410	---	1420	1610	1460	1500	1540	1360	1260	1350	1390	---
13	1410	---	1430	1620	1430	1490	1530	1360	1310	1350	1380	---
14	1410	1400	1440	1620	1450	1490	1520	1280	1240	1340	1390	---
15	1410	1410	1450	1600	1380	1480	1540	1210	1230	1340	1410	---
16	1400	1450	1510	1570	1350	1480	1540	1210	1260	1350	1420	---
17	1410	1440	1530	1560	1220	1480	---	1240	1290	1360	1430	---
18	1410	1460	1570	1540	961	1470	---	1270	1350	1360	1430	---
19	1410	1440	1590	1510	1080	1500	---	1260	1370	1370	1430	1540
20	1420	1440	1580	1520	1340	1500	---	1310	1320	1390	1450	1510
21	1400	1470	1580	1510	1530	1500	---	1350	1340	1430	1450	1510
22	1400	1500	1570	1430	1520	1490	---	1340	1360	1450	1440	1440
23	1400	1500	1570	1430	1490	1500	---	1280	1360	1440	1340	---
24	1400	1500	1570	1470	1530	1500	---	900	1290	1440	1260	---
25	1390	1480	1560	1480	1530	1490	---	808	1410	1450	1280	---
26	1400	1490	1540	1480	1520	1500	---	1230	1340	1450	1290	1440
27	1400	1480	1570	1480	1420	1510	---	1320	1430	1440	1350	1410
28	1410	1460	1600	---	1370	1500	---	1400	1410	1440	1340	1410
29	1370	1440	1590	---	1520	1500	---	1400	1360	1430	1340	1400
30	1400	1460	1590	---	---	1500	1220	1330	1390	1440	1340	1390
31	1400	---	1570	1490	---	1500	---	1220	---	1440	1340	---

09306242 CORRAL GULCH NEAR RANGELY, CO--CONTINUED

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.0	11.5	10.0	5.5	6.5	2.5	7.5	4.5	8.5	4.5	12.0	6.5
2	18.5	12.5	10.0	3.5	7.0	3.5	7.5	4.5	7.5	4.5	12.0	5.5
3	18.5	12.0	10.5	3.5	7.0	4.5	---	---	8.5	4.5	10.0	6.5
4	18.5	11.0	10.5	5.0	7.5	6.0	8.5	4.5	8.5	4.0	11.5	7.0
5	19.0	11.0	11.0	5.0	7.5	5.0	8.5	4.0	8.5	3.5	11.5	7.5
6	19.5	11.5	10.5	5.5	8.0	5.0	6.5	3.5	8.0	5.0	9.5	7.5
7	19.5	12.5	10.5	6.5	7.5	5.5	---	---	7.0	3.5	12.5	5.5
8	19.5	13.0	11.5	7.0	8.5	5.5	---	---	7.5	3.0	11.5	6.0
9	18.5	12.0	---	---	8.0	5.5	---	---	8.0	3.5	12.0	6.5
10	20.5	12.0	---	---	8.0	4.5	7.0	2.0	9.0	4.0	12.5	6.5
11	19.0	12.5	---	---	7.0	4.5	6.0	1.0	9.0	4.0	10.0	6.5
12	18.5	12.5	---	---	7.5	4.0	7.0	4.5	9.0	4.0	10.5	5.5
13	19.0	12.0	---	---	7.5	5.0	8.5	4.5	5.5	1.0	11.5	6.0
14	16.5	13.0	---	---	8.0	5.0	6.5	4.5	6.5	4.5	12.0	7.0
15	18.0	12.0	13.0	6.0	8.0	4.5	8.0	5.0	9.5	5.0	10.0	6.0
16	17.5	12.5	9.0	4.5	7.5	3.0	7.0	5.0	9.5	5.0	9.5	5.5
17	17.0	11.5	9.0	4.5	7.5	3.0	9.0	5.0	10.0	3.0	11.0	5.5
18	17.5	12.0	8.0	4.0	7.0	2.5	7.0	5.0	8.0	1.0	11.0	6.5
19	17.0	13.0	7.0	4.0	7.0	2.5	6.5	5.0	8.0	3.5	12.5	6.5
20	13.5	9.5	7.5	4.5	7.5	3.0	7.5	4.0	8.0	4.5	12.5	6.5
21	14.5	10.5	7.0	3.0	7.0	3.5	8.0	4.0	8.5	6.0	12.5	6.0
22	15.0	9.5	7.0	3.0	7.0	5.0	7.0	.5	10.5	6.0	9.5	6.5
23	15.5	8.0	6.5	4.0	7.0	3.0	6.5	1.5	9.5	7.0	12.0	7.0
24	15.5	5.5	7.0	3.5	7.5	3.0	8.5	4.0	10.0	5.5	12.5	7.0
25	16.0	10.5	6.5	4.0	7.5	3.5	9.5	7.0	10.5	5.5	8.5	6.0
26	16.0	11.0	6.5	3.5	7.0	3.5	9.0	7.0	11.5	6.0	12.0	6.0
27	15.0	9.5	5.5	3.0	5.5	4.0	9.0	7.0	12.0	6.0	12.5	5.5
28	15.0	9.0	6.0	3.5	7.0	4.5	---	---	11.5	5.0	8.5	6.0
29	10.5	5.0	6.0	3.5	7.0	2.5	---	---	9.5	7.0	12.0	6.5
30	10.5	7.0	6.5	3.5	6.5	3.0	---	---	---	---	8.5	6.0
31	10.0	6.0	---	---	6.5	3.0	8.0	5.0	---	---	11.0	5.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	12.5	6.5	16.5	8.0	17.5	5.5	17.5	10.0	16.5	9.0	15.0	7.5
2	8.5	5.5	20.5	6.5	17.0	5.0	17.0	9.0	19.0	8.5	15.0	8.0
3	11.0	5.5	18.0	7.5	18.5	6.5	19.0	8.5	16.5	8.5	15.0	8.5
4	14.0	7.0	18.5	7.5	19.0	7.0	19.0	8.5	16.0	8.0	15.5	8.5
5	14.0	7.0	19.5	7.5	18.5	7.0	19.0	7.5	17.5	8.0	15.5	8.5
6	11.0	6.5	18.0	9.5	17.0	7.5	19.0	7.5	19.5	10.0	14.5	9.5
7	10.0	6.0	17.5	9.0	18.5	7.0	15.0	8.5	19.0	9.5	14.0	9.5
8	13.0	6.0	16.0	8.0	18.5	6.5	18.0	8.5	18.0	9.0	18.0	9.5
9	13.5	6.5	16.0	9.0	18.5	7.5	18.5	8.0	19.0	9.0	13.0	10.0
10	13.5	7.0	18.5	9.0	21.5	7.5	17.5	8.5	17.0	8.5	15.5	9.0
11	9.5	6.5	15.0	9.0	18.5	7.0	18.5	9.0	14.0	9.0	16.0	8.5
12	13.0	6.0	16.0	7.5	18.5	7.5	16.5	8.5	17.5	8.5	15.0	8.5
13	13.5	6.0	15.5	8.0	19.0	7.5	16.0	9.5	17.5	7.0	16.0	8.5
14	14.5	5.0	17.0	7.0	18.0	7.5	17.5	8.5	16.5	9.0	15.0	8.0
15	14.0	6.5	18.0	7.0	17.5	7.0	17.5	8.0	15.5	10.0	16.5	7.5
16	15.0	7.5	17.0	7.5	18.0	7.0	18.0	8.5	16.5	9.5	17.0	9.0
17	---	---	15.0	6.5	17.5	7.5	18.0	8.5	16.5	9.5	17.5	8.5
18	---	---	20.0	6.0	17.5	8.5	17.5	9.0	16.0	9.0	15.5	8.5
19	---	---	20.0	7.0	16.0	9.0	17.0	9.5	15.5	8.5	17.0	10.0
20	---	---	20.5	7.5	16.5	8.0	17.5	8.5	14.0	8.5	17.0	8.5
21	---	---	21.5	8.0	17.5	8.0	17.5	9.0	14.0	8.0	16.0	9.0
22	---	---	21.0	8.5	17.0	8.0	17.0	8.0	14.0	8.5	16.5	7.5
23	---	---	20.5	9.0	16.0	8.0	17.5	9.0	14.0	9.5	13.0	7.5
24	---	---	18.0	8.5	18.0	8.0	17.0	8.5	14.5	10.0	13.0	8.0
25	---	---	18.0	7.0	20.5	8.0	16.0	8.0	18.0	9.0	13.5	8.0
26	---	---	18.5	5.0	17.0	8.5	17.5	8.0	17.0	8.5	13.5	8.0
27	---	---	19.0	5.5	18.5	8.5	16.5	8.0	14.0	8.5	14.0	8.0
28	---	---	20.5	9.5	17.5	7.5	17.0	8.0	15.5	5.5	14.0	8.0
29	---	---	19.5	10.0	17.0	8.5	16.0	8.0	11.5	5.0	13.5	8.0
30	13.5	9.5	20.5	9.0	17.0	9.5	17.0	9.0	14.5	8.0	14.0	8.0
31	---	---	18.0	5.5	---	---	15.5	8.5	14.0	8.0	---	---

BEST DOCUMENT AVAILABLE

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	1.7	39	.19	.91	---	.10	.63	18	.03
2	1.7	38	.17	1.1	35	.08	.63	57	.10
3	1.7	33	.14	.73	---	.05	.63	21	.04
4	1.8	33	.15	.79	---	.05	.63	51	.09
5	2.0	463	3.3	.55	143	.16	.68	74	.13
6	2.4	500	3.5	.48	106	.12	.68	52	.10
7	1.8	104	.51	.80	9	.02	.73	165	.31
8	1.9	70	.35	.80	8	.02	.70	154	.30
9	1.9	24	.12	.66	8	.02	.78	100	.20
10	1.7	56	.26	.69	6	.01	.78	81	.17
11	1.8	29	.14	.69	5	.01	.83	47	.10
12	1.7	31	.14	.70	5	.01	.83	84	.17
13	2.0	110	.68	.79	76	.21	.83	108	.22
14	1.7	61	.30	.70	5	.01	.83	64	.13
15	1.8	73	.36	.49	5	.01	.83	56	.11
16	1.8	74	.35	.49	9	.01	.78	---	.10
17	1.7	49	.23	.49	12	.02	.73	---	.10
18	1.8	39	.18	.49	8	.01	.73	67	.13
19	1.8	71	.34	.49	10	.01	.78	232	.46
20	1.9	75	.38	.53	10	.04	.78	241	.50
21	1.8	51	.25	.47	47	.06	.83	274	.57
22	1.8	64	.30	.53	56	.07	.83	304	.65
23	1.2	68	.25	.50	74	.10	.83	144	.30
24	1.4	68	.29	.54	38	.05	.78	57	.13
25	1.9	73	.38	.56	14	.02	.78	36	.08
26	1.7	62	.30	.58	27	.04	.78	18	.04
27	1.5	58	.24	.58	12	.04	.78	---	.10
28	1.5	56	.23	.58	19	.03	.83	135	.32
29	1.3	113	.42	.58	35	.06	.83	92	.22
30	1.6	---	.20	.63	43	.08	.93	66	.17
31	1.4	---	.20	---	---	---	.93	49	.13
TOTAL	54.0	---	14.88	18.73	---	1.52	24.03	---	6.20

BEST DOCUMENT AVAILABLE

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	.98	46	.12	1.0	69	.18	1.1	---	.20
2	1.0	27	.07	.99	65	.17	1.0	---	.10
3	1.0	29	.08	1.0	42	.11	1.1	---	.20
4	1.1	27	.08	1.0	30	.08	1.1	---	.20
5	1.1	56	.15	1.0	29	.08	1.1	---	.20
6	1.1	49	.14	1.1	37	.11	1.2	60	.20
7	1.1	36	.10	1.1	34	.09	1.2	139	.45
8	1.1	45	.12	1.1	27	.08	1.2	123	.40
9	1.1	33	.09	1.1	28	.09	1.1	94	.28
10	1.1	39	.10	1.1	20	.06	1.2	81	.23
11	1.0	23	.06	1.1	44	.13	1.2	76	.24
12	1.0	10	.03	1.1	98	.28	1.2	---	.30
13	.96	31	.08	1.3	1840	7.3	1.2	---	.30
14	.96	29	.07	1.4	519	1.5	1.2	---	.30
15	.95	58	.13	1.2	763	1.5	1.2	---	.30
16	.95	58	.13	1.0	539	.76	1.3	---	.50
17	.95	64	.15	1.3	710	1.5	1.3	---	.50
18	.94	60	.15	3.5	8260	170	1.4	711	2.3
19	1.0	45	.18	1.9	4100	32	1.4	390	1.3
20	1.0	30	.07	1.1	662	1.1	1.4	---	.80
21	1.0	20	.05	.84	78	.08	1.4	---	.80
22	1.5	2530	14	.79	88	.11	1.4	306	1.0
23	1.4	1390	5.5	1.1	878	3.2	1.3	248	.81
24	1.2	551	2.4	.90	55	.08	1.3	205	.67
25	1.0	62	.17	.96	---	.10	1.3	184	.59
26	1.0	40	.11	1.0	---	.10	1.4	161	.52
27	1.1	20	.07	1.2	---	1.0	1.4	216	.66
28	1.1	14	.04	1.2	---	1.0	1.3	216	.71
29	1.7	2610	24	1.0	---	.10	1.3	138	.43
30	2.4	2010	16	---	---	---	1.4	97	.30
31	1.0	56	.16	---	---	---	1.4	83	.25
TOTAL	34.79	---	64.60	34.38	---	222.89	39.0	---	16.04

BEST DOCUMENT AVAILABLE

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	1.5	81	.24	4.3	2350	24	5.2	758	11
2	1.4	143	.43	4.9	2400	31	5.3	2020	28
3	1.4	91	.28	5.1	2150	28	5.2	892	13
4	1.4	88	.27	5.0	---	30	5.0	268	3.7
5	1.4	60	.18	5.7	---	35	5.1	266	3.8
6	1.4	34	.10	6.0	---	35	4.7	111	1.5
7	1.4	25	.07	6.6	---	40	4.0	104	1.2
8	1.4	55	.16	6.8	---	42	3.9	120	1.4
9	1.4	63	.18	7.5	---	70	3.6	104	1.1
10	1.4	77	.22	7.7	---	80	3.0	184	1.6
11	1.4	41	.12	8.4	---	95	2.7	676	5.1
12	1.4	38	.11	8.6	---	110	3.3	300	2.7
13	1.4	16	.04	8.6	---	110	3.4	193	1.8
14	1.4	40	.11	9.0	4710	118	3.3	80	.73
15	1.4	22	.06	8.7	5300	128	2.7	---	.30
16	1.4	86	.23	9.2	4890	134	2.7	50	.40
17	1.4	227	.63	9.8	4800	127	2.7	40	.33
18	1.3	212	.58	9.1	5180	127	2.6	32	.24
19	1.3	282	.76	8.0	5210	119	2.6	46	.37
20	1.3	183	.49	8.4	5240	122	2.6	35	.25
21	1.4	113	.33	8.4	3560	83	2.7	36	.26
22	2.3	1770	9.5	8.2	---	90	2.6	31	.22
23	3.0	3060	20	8.1	---	90	2.9	717	12
24	3.1	2250	16	8.2	---	90	3.6	2850	31
25	3.0	1970	14	7.5	---	75	3.9	1200	13
26	3.1	1420	11	6.0	---	50	2.1	119	.85
27	3.2	1680	13	6.5	---	55	2.1	28	.16
28	3.4	1530	12	6.4	---	50	2.2	48	.29
29	4.1	2590	26	6.3	1730	30	2.1	40	.23
30	4.4	2740	29	5.6	1490	23	2.0	34	.18
31	---	---	---	5.2	983	14	---	---	---
TOTAL	58.8	---	156.09	223.8	---	2255	99.8	---	136.71

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	2.0	23	.13	1.6	44	.19	1.5	45	.18
2	2.5	5620	42	1.5	22	.09	1.5	56	.23
3	2.7	492	3.7	1.5	19	.08	1.5	43	.17
4	2.6	110	.79	1.4	30	.12	1.4	47	.18
5	2.5	68	.44	1.7	134	.78	1.3	---	.20
6	2.5	55	.36	2.3	727	4.6	1.5	---	1.0
7	2.6	42	.28	2.2	606	3.9	1.3	---	1.0
8	2.4	87	.54	1.9	50	.26	1.7	---	4.0
9	2.4	62	.36	2.5	---	4.0	1.9	---	3.0
10	2.1	72	.41	2.0	---	.40	1.8	---	3.0
11	2.1	60	.34	2.0	---	.40	1.5	691	3.0
12	2.0	---	.30	2.0	---	.20	1.5	1060	4.3
13	2.0	---	.30	1.9	33	.16	1.4	675	2.5
14	1.9	---	.30	2.0	35	.18	1.4	590	2.1
15	1.9	66	.30	2.0	59	.31	1.3	661	2.3
16	1.8	61	.29	1.9	44	.21	1.4	1390	5.3
17	1.7	109	.51	1.9	29	.13	1.4	1250	5.0
18	1.7	58	.27	1.8	42	.18	1.5	1060	4.1
19	1.6	51	.22	1.7	37	.15	1.4	850	3.3
20	1.6	50	.21	1.4	33	.12	1.4	880	3.3
21	1.3	60	.29	1.4	---	.15	1.4	1850	7.2
22	1.4	51	.23	1.4	---	.15	1.7	709	2.9
23	1.4	64	.29	1.6	---	10	1.0	70	.24
24	1.4	53	.24	1.6	---	3.0	.99	51	.17
25	1.5	60	.28	1.7	---	7.0	.99	59	.19
26	1.4	113	.48	1.6	---	.60	.94	53	.15
27	1.4	44	.19	1.6	144	.64	.94	33	.08
28	1.4	35	.15	1.6	100	.45	.89	26	.06
29	1.5	33	.14	1.6	78	.33	.89	26	.06
30	1.5	21	.09	1.6	61	.26	.89	18	.04
31	1.5	23	.10	1.5	58	.24	---	---	---
TOTAL	58.3	---	54.53	54.4	---	39.28	40.23	---	59.25
YEAR	740.26		3026.97						

09306255 YELLOW CREEK NEAR WHITE RIVER, CO

LOCATION.--Lat 40°10'07", long 108°24'02", in NE¼SW¼ sec.4, T.2 N., R.98 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 160 ft (49 m) downstream from bridge on State Highway 64, 0.3 mi (0.5 km) upstream from mouth, and 10 mi (16 km) northwest of White River City.

DRAINAGE AREA.--262 mi^2 (679 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Concrete control since Sept. 18, 1974. Altitude of gage is 5,535 ft (1,687 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 300 acres (1.21 km^2) above station.

AVERAGE DISCHARGE.--8 years, 1.85 ft^3/s (0.052 m^3/s) 1,340 acre-ft/yr (1.65 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,800 ft^3/s (193 m^3/s) Sept. 7, 1978, gage height, 12.97 ft (3.953 m), from contracted opening and flow over road measurement of peak flow; no flow Sept. 7-16, 1978, Dec. 15, 1978, to Jan. 14, 1979.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 25, 1965, reached a discharge of 1,050 ft^3/s (29.7 m^3/s) by slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 494 ft^3/s (14.0 m^3/s) at 0400 Feb. 19, gage height, 8.02 ft (2.444 m), only peak above base of 100 ft^3/s (2.8 m^3/s); minimum daily, 0.73 ft^3/s (0.021 m^3/s) Dec. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	2.1	1.5	1.2	1.5	3.9	2.5	2.3	2.6	2.4	1.6	2.2
2	1.4	2.0	1.8	1.2	1.5	3.4	2.6	2.2	2.6	2.5	1.5	2.1
3	1.4	1.9	2.0	1.3	1.3	3.4	2.4	2.2	2.5	2.3	1.5	2.1
4	1.4	1.8	2.2	1.1	1.3	3.7	2.5	2.3	2.6	2.1	1.4	2.0
5	1.5	1.7	2.2	1.1	1.5	3.9	2.5	2.3	2.5	1.9	1.4	2.0
6	1.5	1.8	2.2	1.6	1.3	3.7	2.5	2.4	2.6	1.9	1.5	2.0
7	1.5	1.6	2.2	1.2	1.2	3.8	2.4	2.6	2.6	1.9	1.5	2.1
8	1.5	1.6	1.6	1.2	1.2	3.9	2.4	2.6	2.6	2.0	1.5	2.3
9	1.6	1.6	1.3	1.2	1.2	3.4	2.4	2.6	2.6	2.1	1.5	2.3
10	1.6	1.6	1.4	1.2	1.2	3.6	2.4	2.4	2.5	2.0	1.4	2.3
11	1.6	1.6	1.3	1.4	1.2	3.4	2.4	3.2	2.6	2.0	1.5	2.6
12	1.6	1.8	1.3	1.3	1.2	3.2	2.4	3.2	2.5	2.0	1.4	2.3
13	1.6	1.8	1.2	1.2	1.2	2.9	2.4	2.9	2.5	2.1	1.5	2.2
14	1.7	1.7	1.1	1.3	1.2	3.2	2.4	2.6	2.5	2.1	1.6	2.2
15	1.7	1.7	1.0	1.3	1.2	3.4	2.3	2.6	2.4	1.9	2.2	2.2
16	1.7	1.6	.90	1.3	1.4	3.0	2.3	2.6	2.4	1.8	1.7	2.1
17	1.7	1.6	.90	1.2	1.6	2.4	2.1	3.0	2.4	1.8	1.7	2.1
18	1.7	1.6	.96	1.2	19	2.2	2.1	2.5	2.3	1.7	1.7	2.2
19	1.7	1.6	1.1	1.2	200	2.4	2.2	2.4	2.2	1.7	1.8	2.1
20	1.9	1.6	1.1	1.7	73	2.3	2.4	2.4	2.2	1.7	1.9	2.2
21	1.9	1.3	.83	1.8	19	2.3	2.4	2.7	2.1	1.6	1.9	2.2
22	1.7	1.3	.73	1.7	4.6	2.8	2.4	2.9	2.1	1.6	1.8	2.2
23	1.6	1.3	.76	1.7	3.3	2.5	2.4	2.8	2.1	1.7	2.0	2.2
24	1.6	1.3	.79	1.6	2.6	2.4	2.3	2.8	2.1	1.7	2.0	2.2
25	1.6	1.3	.84	1.6	2.4	2.5	2.2	2.7	2.1	1.7	3.2	2.2
26	1.6	1.6	.99	1.5	3.2	2.6	2.1	2.6	2.1	1.6	2.3	2.2
27	1.6	1.3	.99	1.5	5.8	2.4	2.0	2.5	2.2	1.6	2.2	2.2
28	1.6	1.3	1.0	1.5	7.2	2.4	2.0	2.4	2.2	1.6	2.1	2.2
29	1.6	1.3	1.2	1.5	6.5	2.4	2.1	2.4	2.3	1.5	2.1	2.2
30	1.7	1.3	1.2	1.5	---	2.5	2.4	2.5	2.3	1.6	2.1	2.2
31	1.8	---	1.2	1.5	---	2.6	---	2.6	---	1.6	2.2	---
TOTAL	50.0	47.6	39.79	42.8	368.8	92.5	69.9	80.2	71.3	57.7	55.7	65.6
MEAN	1.61	1.59	1.28	1.38	12.7	2.98	2.33	2.59	2.38	1.86	1.80	2.19
MAX	1.9	2.1	2.2	1.8	200	3.9	2.6	3.2	2.6	2.5	3.2	2.6
MIN	1.4	1.3	.73	1.1	1.2	2.2	2.0	2.2	2.1	1.5	1.4	2.0
AC-FT	99	94	79	85	732	183	139	159	141	114	110	130

CAL YR 1979 TOTAL 609.03 MEAN 1.67 MAX 20 MIN .00 AC-FT 1210
WTR YR 1980 TOTAL 1041.89 MEAN 2.85 MAX 200 MIN .73 AC-FT 2070

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1975 to current year.
WATER TEMPERATURE: April 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1975. Pumping sediment sampler since April 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 5,790 micromhos Sept. 17, 1978; minimum, 457 micromhos July 21, 1979.
WATER TEMPERATURES: Maximum, 35.0°C July 25, 1978; minimum, freezing point on many days during winter months each year.
SEDIMENT CONCENTRATIONS: Maximum daily, 44,000 mg/L Sept. 7, 1978; minimum daily, no flow several days during September 1978, many days during 1979.
SEDIMENT LOADS: Maximum daily, 290,000 tons (263,000 t) Sept. 7, 1978; minimum daily, no flow several days during September 1978, many days during 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 4,440 micromhos June 10; minimum, 517 micromhos Feb. 18.
WATER TEMPERATURES: Maximum, 31.5°C June 21; minimum, freezing point on many days during October to April.
SEDIMENT CONCENTRATIONS: Maximum daily, 13,200 mg/L Feb. 19; minimum daily, 3 mg/L Aug. 3.
SEDIMENT LOADS: Maximum daily, 8,500 tons (7,710 t) Feb. 19; minimum daily, 0.01 ton (0.01 t) Aug. 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	NITROGEN, DISSOLV (MG/L AS N)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, TOTAL, IMMED. (COLS. PER 100 ML)
OCT 23...	0945	1.8	3250	8.8	3.0	--	10.2	--	--	--	--
JAN 14...	1330	3.7	2350	8.4	.0	--	--	--	--	--	--
FEB 19...	1210	64	620	8.6	.0	5500	13.6	2.0	38	> 18	K300
AUG 19...	1140	1.7	3040	8.5	17.0	--	10.1	--	--	--	--
SEP 18...	1030	1.9	3000	8.3	11.0	4.0	11.0	2.8	25	.9	K110

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DISSOLVED (MG/L AS SO4)
OCT 23...	--	510	0	41	100	600	12	5.0	1100	--	540
JAN 14...	--	310	0	30	56	500	12	3.5	860	--	330
FEB 19...	K40	75	0	12	11	130	6.5	4.7	230	--	110
AUG 19...	--	400	0	28	80	640	14	4.5	1090	--	490
SEP 18...	88	440	0	33	86	590	12	3.7	1100	.0	470

K BASED ON NON-IDEAL COLONY COUNT.

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	BROMIDE DISSOLVED (MG/L AS BR)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 105 DEG. C, DISSOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
OCT										
23...	120	1.9	--	13	--	2090	2.8	10.2	--	1.5
JAN										
14...	85	1.5	--	9.0	--	1540	2.0	15.4	--	1.5
FEB										
19...	16	.6	.10	7.7	425	489	.67	84.5	1400	.86
AUG										
19...	110	2.2	--	7.3	--	2020	2.7	9.2	--	1.4
SEP										
18...	110	2.3	.10	7.4	2050	1970	2.6	10.1	3	1.8

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	ANTIMONY, TOTAL (UG/L AS SB)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, DISSOLVED (UG/L AS B)	MERCURY DISSOLVED (UG/L AS HG)	SELENIUM, DISSOLVED (UG/L AS SE)	CARBON, ORGANIC DISSOLVED (MG/L AS C)
OCT										
23...	--	--	--	--	--	--	590	--	--	25
JAN										
14...	--	--	--	--	--	--	450	--	--	33
FEB										
19...	.180	.92	1.1	.110	--	4	200	.0	2	19
AUG										
19...	--	--	--	--	--	--	670	--	--	36
SEP										
18...	.010	.99	1.0	.010	0	5	640	.0	2	19

DATE	TIME	GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)
FEB											
19...	1210	6.1	100	9.0	150	6.9	60	7.1	61	.10	3.1
SEP											
18...	1030	< 16	.3	< 23	.5	< 13	.8	< 12	.7	.11	5.1

DATE	TIME	CYANIDE TOTAL (MG/L AS CN)	PHENOLS (UG/L)	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)
FEB										
19...	1210	.00	5	--	--	--	--	--	--	--
SEP										
18...	1030	.01	1	.00	.00	.00	.00	.00	.00	.00

DATE	DIELDRIN TOTAL (UG/L)	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)
FEB										
19...	--	--	--	--	--	--	--	--	--	--
SEP										
18...	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	METHYL TRI-THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
FEB										
19...	--	--	--	--	--	--	--	--	--	--
SEP										
18...	.00	.00	.00	.00	.00	0	.00	.00	.00	.00

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
FEB					FEB				
20...	1125	55	7610	1130	21...	1730	28	9150	692
20...	1210	57	7820	1200	26...	1512	3.0	1530	12
21...	1545	13	6440	226					

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	3360	3330	3600	3530	---	3150		---	3400	3060	2960
2	---	3340	3280	3570	3480	---	3040		---	3400	3110	2950
3	---	3350	3210	3550	3440	---	3160		---	3470	3040	2940
4	---	3350	3270	3510	3600	---	3400		---	3440	2980	2930
5	---	3360	3340	3490	3500	---	3430		3070	3450	2960	2910
6	---	3380	3190	3510	3380	---	3480		3360	3430	3010	2890
7	---	3400	3200	3470	---	---	3560		3320	3390	3080	2890
8	---	3380	3280	3460	3450	---	3530		3290	3360	3070	2930
9	3180	3380	3390	3400	3610	---	3540		3270	3430	3060	2980
10	3200	3350	3430	3270	3520	---	3640		3390	3390	3040	2950
11	3220	3330	3430	---	3490	---	3580		3390	3370	3020	2950
12	3220	3320	3530	---	3490	---	3520		3340	3360	2970	2990
13	3240	3340	3550	---	3510	3420	3520		3320	3310	2980	2990
14	3270	3330	3570	2760	3360	3150	3510		3320	3350	2980	2960
15	3260	3330	3570	3220	3080	2930	3490		3300	3340	2920	2960
16	3260	3360	3600	3340	2990	3530	3440		3230	3330	3100	2940
17	3230	3370	3630	3360	2930	3780	3410		3270	3310	3060	2920
18	3220	3270	3690	3340	1540	3420	3460		3310	3280	3040	2920
19	3230	3240	3720	3420	663	3540	3480		3380	3280	3000	2910
20	2970	3090	3650	3440	688	3620	3500		3390	3260	3000	2920
21	3260	3400	3650	3410	1110	3590	3520		3370	3240	3010	2930
22	3270	3620	3620	3410	---	3410	3510		3410	3240	2980	2920
23	3280	3530	3630	3430	---	3660	3490		3490	3210	2930	2930
24	3260	3250	3610	3350	---	3600	3500		3340	3210	3030	2940
25	3280	3200	3580	3360	---	3610	---		3300	3260	2860	2930
26	3270	3240	3590	3510	---	3540	---		3360	3250	3070	2940
27	3240	3420	3550	3500	---	3500	---		3360	3230	3030	2950
28	3210	3650	3540	3450	---	3520	---		3220	3210	3030	2950
29	3150	3540	3570	3460	---	3450	---		3300	3150	2990	2950
30	3230	3440	3580	3630	---	3300	---		3410	3140	2970	2950
31	3340	---	3600	3660	---	3210	---		---	3100	2960	---

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	1.5	.0	.5	.0	2.5	.0	.0	.0	---	---
2	---	---	6.5	.0	.5	.0	2.5	1.0	.0	.0	---	---
3	---	---	7.5	.5	.5	.0	2.0	.0	2.0	.0	---	---
4	---	---	8.5	.5	.5	.0	3.0	.5	3.5	.5	---	---
5	---	---	10.5	.5	.5	.0	2.5	.0	2.0	.0	---	---
6	---	---	9.0	.5	.5	.0	2.0	.0	3.5	.0	---	---
7	---	---	8.0	1.5	.5	.0	1.0	.0	---	---	---	---
8	---	---	10.0	1.0	2.5	.5	3.0	.0	.5	.0	---	---
9	19.5	4.5	8.5	1.0	3.0	.5	4.0	1.0	.5	.0	---	---
10	19.5	2.5	8.5	.5	3.0	.0	4.0	.0	.5	.0	---	---
11	19.0	2.5	7.0	.5	2.5	.5	---	---	.5	.0	---	---
12	16.0	2.0	8.0	.5	.5	.0	---	---	.5	.0	---	---
13	19.0	2.0	7.0	.5	.5	.0	---	---	.5	.0	10.0	.5
14	13.0	3.5	6.5	.0	.5	.0	3.5	.0	3.0	.0	13.5	.0
15	17.5	2.5	5.0	.0	.5	.0	5.0	2.5	5.5	2.0	11.0	1.0
16	18.0	5.5	4.5	.0	.5	.0	4.5	2.5	6.0	1.5	7.5	.0
17	15.5	1.5	3.0	.5	.5	.0	5.0	2.0	5.0	1.5	8.0	.0
18	16.5	6.0	7.5	.5	.5	.0	4.5	1.0	1.5	.0	---	---
19	17.5	8.0	4.0	.5	.5	.0	2.0	.0	.5	.0	---	---
20	8.0	3.0	.5	.0	.5	.0	.0	.0	1.5	.0	16.0	2.5
21	10.0	2.0	.5	.0	2.0	.0	.0	.0	4.5	.0	15.5	.5
22	12.5	.0	.5	.0	3.0	2.0	.0	.0	---	---	9.0	1.5
23	14.5	.0	.5	.0	3.5	1.5	.0	.0	---	---	15.5	2.5
24	12.5	1.5	.5	.0	2.5	.5	.0	.0	---	---	15.0	3.0
25	15.0	1.0	.5	.5	3.0	.5	1.0	.0	---	---	7.0	1.5
26	14.5	2.0	.5	.0	1.0	.5	.0	.0	---	---	16.0	1.0
27	14.0	1.5	.5	.0	2.5	.5	.0	.0	---	---	17.0	.5
28	11.5	.0	.0	.0	3.0	1.5	.0	.0	---	---	8.5	1.5
29	5.5	.5	.5	.0	2.0	.5	.0	.0	---	---	16.5	2.0
30	8.5	.5	.5	.0	2.5	.5	.0	.0	---	---	8.0	.5
31	5.0	.0	---	---	.5	.0	.5	.0	---	---	12.5	.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	14.0	.5			---	---	30.0	14.0	28.0	12.5	24.5	6.0
2	8.0	.5			---	---	25.5	14.5	29.5	13.0	25.5	6.0
3	14.0	.5			---	---	28.5	11.5	27.0	10.5	25.5	7.5
4	19.5	2.5			---	---	31.0	10.5	27.0	8.5	26.5	7.5
5	18.5	2.0			28.0	9.5	30.0	8.0	28.0	8.5	26.5	7.0
6	16.5	3.0			27.0	5.5	31.0	7.0	28.5	11.0	25.0	9.0
7	15.5	1.0			29.0	5.5	24.5	10.5	29.0	10.5	22.5	11.0
8	18.0	.5			30.0	5.5	27.5	12.5	29.0	10.5	19.0	12.0
9	20.0	.5			31.5	6.0	31.0	11.0	28.5	13.5	17.5	10.5
10	16.5	4.0			26.0	7.0	27.5	12.0	28.5	10.5	19.0	12.0
11	9.5	1.0			28.0	9.0	28.5	12.5	29.5	7.5	18.5	8.0
12	12.0	.5			23.5	7.5	26.5	11.5	26.0	7.5	25.0	10.0
13	17.0	6.0			23.5	7.5	24.5	14.0	28.5	11.5	24.5	9.5
14	19.5	2.5			22.0	7.0	27.0	11.0	25.5	12.5	21.5	6.5
15	20.0	2.5			23.0	7.5	28.5	9.0	26.0	14.0	23.0	6.0
16	21.5	1.0			28.5	7.0	31.0	9.5	26.5	10.0	24.0	9.5
17	23.0	.0			24.5	7.5	30.0	10.0	28.0	10.0	23.5	6.5
18	24.0	3.0			30.5	10.0	30.0	12.0	26.5	10.0	23.0	6.0
19	25.0	3.0			27.5	10.5	29.0	11.5	23.5	12.0	21.5	10.0
20	24.5	5.5			28.0	9.0	30.0	10.0	25.5	7.0	23.5	8.5
21	22.0	6.5			31.5	8.5	31.0	9.5	26.5	6.5	21.0	5.0
22	20.5	7.5			31.0	8.5	29.5	9.5	24.5	7.0	21.5	3.5
23	20.0	6.5			27.5	8.0	31.0	12.0	24.0	12.0	20.0	2.5
24	11.0	9.0			30.5	7.5	30.5	16.0	23.5	13.0	20.0	3.5
25	---	---			30.5	7.5	30.0	11.0	21.0	11.5	21.5	2.5
26	---	---			29.5	8.5	29.5	10.0	28.0	9.5	20.5	3.5
27	---	---			28.5	9.0	30.5	9.5	26.0	9.0	21.5	4.5
28	---	---			30.5	6.5	30.0	10.0	26.0	8.5	21.5	4.5
29	---	---			29.0	7.5	28.0	9.5	24.5	10.0	22.0	5.0
30	---	---			28.5	13.0	29.5	13.0	23.0	7.0	21.5	4.0
31	---	---			---	---	29.5	11.5	21.5	6.5	---	---

BEST DOCUMENT AVAILABLE

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	1.4	57	.22	2.1	415	2.4	1.5	140	.57
2	1.4	60	.23	2.0	420	2.3	1.8	110	.53
3	1.4	72	.27	1.9	360	1.7	2.0	90	.49
4	1.4	60	.23	1.8	360	1.7	2.2	100	.59
5	1.5	50	.20	1.7	280	1.3	2.2	240	1.4
6	1.5	45	.18	1.8	225	1.1	2.2	140	.83
7	1.5	55	.22	1.6	---	1.0	2.2	90	.53
8	1.5	66	.27	1.6	320	1.4	1.6	---	.60
9	1.6	33	.14	1.6	130	.56	1.3	---	.50
10	1.6	90	.22	1.6	160	.69	1.4	---	.80
11	1.6	245	1.1	1.6	210	.91	1.3	195	.68
12	1.6	145	.63	1.8	170	.83	1.3	200	.70
13	1.6	90	.39	1.8	370	1.8	1.2	130	.42
14	1.7	---	.40	1.7	450	2.1	1.1	100	.30
15	1.7	63	.29	1.7	---	2.0	1.0	110	.30
16	1.7	265	1.2	1.6	430	1.9	.90	140	.34
17	1.7	225	1.0	1.6	350	1.5	.90	150	.36
18	1.7	65	.30	1.6	260	1.1	.96	---	.40
19	1.7	62	.28	1.6	280	1.2	1.1	245	.73
20	1.9	1070	5.5	1.6	500	2.2	1.1	170	.50
21	1.9	500	2.6	1.3	380	1.3	.83	180	.40
22	1.7	150	.69	1.3	150	.53	.73	170	.34
23	1.6	210	.91	1.3	200	.70	.76	40	.08
24	1.6	160	.69	1.3	170	.60	.79	140	.30
25	1.6	210	.91	1.3	310	1.1	.84	---	.40
26	1.6	140	.60	1.6	340	1.5	.99	185	.49
27	1.6	130	.56	1.3	290	1.0	.99	185	.49
28	1.6	160	.69	1.3	270	.95	1.0	170	.46
29	1.6	360	1.6	1.3	---	.60	1.2	169	.74
30	1.7	270	1.2	1.3	170	.60	1.2	142	.51
31	1.8	525	2.6	---	---	---	1.2	284	1.5
TOTAL	50.0	---	26.32	47.6	---	38.57	39.79	---	17.28

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	1.2	---	.70	1.5	---	.90	3.9	1160	12
2	1.2	---	.70	1.5	---	.80	3.4	675	6.2
3	1.3	205	.70	1.3	---	.70	3.4	616	5.7
4	1.1	260	.77	1.3	---	.70	3.7	1700	17
5	1.1	280	.83	1.5	---	.80	3.9	520	5.5
6	1.6	---	2.0	1.3	---	.70	3.7	2600	26
7	1.2	---	1.0	1.2	---	.60	3.8	5700	58
8	1.2	340	1.1	1.2	---	.60	3.9	6150	65
9	1.2	360	1.2	1.2	---	.60	3.4	6050	56
10	1.2	430	1.4	1.2	---	.60	3.6	6200	60
11	1.4	345	1.3	1.2	---	.60	3.4	---	56
12	1.3	---	.90	1.2	---	.60	3.2	4620	40
13	1.2	---	.80	1.2	---	.60	2.9	3190	25
14	1.3	2000	13	1.2	---	.60	3.2	9410	81
15	1.3	340	1.2	1.2	255	.61	3.4	6930	64
16	1.3	210	.74	1.4	430	1.2	3.0	---	42
17	1.2	230	.75	1.6	675	2.2	2.4	4070	26
18	1.2	240	.78	19	---	300	2.2	2310	14
19	1.2	250	.81	200	13200	8500	2.4	440	2.9
20	1.7	240	1.1	73	9720	2000	2.3	682	4.2
21	1.8	170	.83	19	4190	285	2.3	605	3.8
22	1.7	145	.67	4.6	1100	11	2.8	605	4.6
23	1.7	165	.76	3.3	1370	12	2.5	605	4.1
24	1.6	203	.88	2.6	1430	10	2.4	671	4.3
25	1.6	170	.73	2.4	1520	10	2.5	330	2.2
26	1.5	---	.80	3.2	1460	12	2.6	---	4.0
27	1.5	---	.90	5.8	4210	85	2.4	891	5.8
28	1.5	---	1.0	7.2	3330	84	2.4	473	3.1
29	1.5	300	1.2	6.5	2300	36	2.4	418	2.7
30	1.5	---	1.0	---	---	---	2.5	297	2.0
31	1.5	---	.90	---	---	---	2.6	308	2.2
TOTAL	42.8	---	41.45	368.8	---	11358.41	92.5	---	705.3

BEST DOCUMENT AVAILABLE

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	2.5	242	1.6	2.3	---	2.0	2.6	98	.69
2	2.6	187	1.3	2.2	---	2.0	2.6	70	.49
3	2.4	1160	8.3	2.2	---	2.0	2.5	49	.33
4	2.5	467	3.2	2.3	---	2.0	2.6	37	.26
5	2.5	403	2.8	2.3	---	2.0	2.5	122	.82
6	2.5	335	2.4	2.4	315	2.0	2.6	88	.62
7	2.4	814	5.7	2.6	720	5.1	2.6	57	.40
8	2.4	787	5.4	2.6	650	4.8	2.6	43	.30
9	2.4	545	3.8	2.6	250	1.8	2.6	37	.26
10	2.4	484	3.1	2.4	290	1.9	2.5	401	2.7
11	2.4	385	2.5	3.2	580	4.8	2.6	162	1.1
12	2.4	264	1.7	3.2	810	7.0	2.5	88	.59
13	2.4	407	2.6	2.9	420	3.1	2.5	60	.41
14	2.4	187	1.2	2.6	270	1.9	2.5	63	.43
15	2.3	275	1.7	2.6	320	2.2	2.4	52	.34
16	2.3	462	2.9	2.6	615	4.7	2.4	45	.29
17	2.1	473	2.7	3.0	580	4.7	2.4	50	.32
18	2.1	275	1.6	2.5	530	3.6	2.3	66	.40
19	2.2	214	1.3	2.4	440	2.9	2.2	180	1.1
20	2.4	182	1.2	2.4	415	2.7	2.2	55	.33
21	2.4	463	2.6	2.7	300	2.2	2.1	62	.35
22	2.4	319	2.1	2.9	390	3.1	2.1	---	.30
23	2.4	407	2.6	2.8	370	2.8	2.1	98	.56
24	2.3	330	2.0	2.8	320	2.4	2.1	105	.60
25	2.2	310	1.8	2.7	117	.80	2.1	85	.48
26	2.1	300	1.7	2.6	128	.90	2.1	80	.45
27	2.0	355	1.9	2.5	88	.59	2.2	---	.50
28	2.0	370	2.0	2.4	88	.57	2.2	---	.50
29	2.1	325	1.8	2.4	102	.66	2.3	---	.50
30	2.4	360	2.3	2.5	72	.49	2.3	---	.50
31	---	---	---	2.6	60	.42	---	---	---
TOTAL	69.9	---	77.8	80.2	---	77.93	71.3	---	16.92

BEST DOCUMENT AVAILABLE

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	2.4	80	.52	1.6	14	.06	2.2	32	.19
2	2.5	110	.74	1.5	8	.03	2.1	60	.34
3	2.3	50	.31	1.5	3	.01	2.1	60	.34
4	2.1	26	.14	1.4	4	.02	2.0	33	.18
5	1.9	36	.18	1.4	4	.02	2.0	21	.11
6	1.9	42	.22	1.5	13	.05	2.0	30	.16
7	1.9	70	.36	1.5	18	.07	2.1	22	.12
8	2.0	27	.15	1.5	20	.08	2.3	24	.15
9	2.1	---	.18	1.5	15	.06	2.3	144	10
10	2.0	28	.15	1.4	18	.07	2.3	64	.40
11	2.0	16	.09	1.5	12	.05	2.6	97	7.1
12	2.0	16	.09	1.4	16	.06	2.3	68	.42
13	2.1	13	.07	1.5	20	.08	2.2	32	.19
14	2.1	21	.12	1.6	26	.11	2.2	26	.15
15	1.9	25	.13	2.2	965	34.7	2.2	26	.15
16	1.8	23	.11	1.7	120	.55	2.1	26	.15
17	1.8	---	.11	1.7	34	.16	2.1	44	.25
18	1.7	---	.11	1.7	31	.14	2.2	20	.12
19	1.7	38	.17	1.8	82	.40	2.1	60	.34
20	1.7	31	.14	1.9	26	.13	2.2	24	.14
21	1.6	33	.14	1.9	25	.13	2.2	14	.08
22	1.6	43	.19	1.9	26	.13	2.2	60	.36
23	1.7	26	.12	2.0	32	.17	2.2	56	.33
24	1.7	11	.05	2.0	40	.22	2.2	20	.12
25	1.7	22	.10	3.2	1150	96	2.2	16	.10
26	1.6	23	.10	2.3	150	.98	2.2	56	.33
27	1.6	70	.30	2.2	96	.57	2.2	26	.15
28	1.6	60	.26	2.1	85	.48	2.2	32	.19
29	1.5	42	.17	2.1	50	.28	2.2	21	.12
30	1.6	30	.13	2.1	40	.23	2.2	36	.21
31	1.6	14	.06	2.2	30	.18	---	---	---
TOTAL	57.7	---	5.91	55.7	---	136.22	65.6	---	22.88
YEAR	1061.39		12495.10						

BEST DOCUMENT AVAILABLE

[illegible] WHITE RIVER [illegible]

LOCATION.--[illegible]

DRAINAGE AREA.--[illegible]

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--[illegible]

REVISED RECORDS.--[illegible]

GAGE.--Water-stage recorder. [illegible]

REMARKS.--[illegible]

AVERAGE DISCHARGE.--[illegible]

EXTREMES FOR PERIOD OF RECORD.--[illegible]

EXTREMES FOR CURRENT YEAR.--[illegible]

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 2[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	June [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Minimum daily discharge, [illegible]

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]	---	[illegible]	[illegible]	---	[illegible]	---	[illegible]	---	[illegible]	[illegible]	---
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAX	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AC-FT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CAL YR 1979 TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] AC-FT [illegible]
WTR YR 1980 TOTAL [illegible] MEAN [illegible] MAX [illegible] MIN [illegible] AC-FT [illegible]

BEST DOCUMENT AVAILABLE

GREEN RIVER BASIN

09306500 WHITE RIVER ABOVE RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1975 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DISSOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM AD-SORPTION RATIO
OCT [illegible]...	1035	435E	751	7.6	9.0	10.1	280	96	69	25	57	1.5
NOV [illegible]...	1430	266	850	8.4	.5	9.2	350	120	91	30	74	1.7
DEC [illegible]...	1215	369	867	8.4	.0	11.4	280	81	73	24	60	1.6
JAN [illegible]...	1200	322	821	8.2	.0	10.1	300	100	77	27	68	1.7
FEB [illegible]...	1230	1290	831	7.8	.5	10.3	190	59	48	18	68	2.2
MAR [illegible]...	1530	650	950	8.1	8.0	10.2	320	110	79	32	86	2.1
APR [illegible]...	1625	1520	784	7.4	14.0	--	280	120	66	20	55	1.4
JUN [illegible]...	1215	2370	352	7.6	14.5	8.2	130	29	35	9.7	14	.5
JUL [illegible]...	1000 **	440	713	8.2	18.0	7.4	270	81	69	24	45	1.2
AUG [illegible]...	1545	271	827	8.1	19.0	8.0	240	87	64	31	73	1.9
SEP [illegible]...	1315	401	718	7.9	15.5	8.0	260	91	63	25	58	1.6

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)
OCT [illegible]...	2.4	180	170	32	.3	13	474	.65	808	.11	.020	.81
NOV [illegible]...	2.3	250	210	41	.3	18	608	.83	457	.15	.010	.69
DEC [illegible]...	2.?	200	190	36	.1	16	483	.66	481	.22	.010	.28
JAN [illegible]...	2.4	200	190	38	.3	17	528	.72	460	.23	.030	.25
FEB [illegible]...	4.6	130	170	53	.3	9.6	425	.58	1470	.44	.170	3.4
MAR [illegible]...	3.1	210	240	37	.3	12	611	.83	1070	.28	.060	1.1
APR [illegible]...	2.5	160	160	32	.4	14	473	.64	1940	.41	.130	2.7
JUN [illegible]...	1.3	99	42	9.4	.4	11	183	.26	1190	.18	.030	.91
JUL [illegible]...	1.8	190	140	28	.4	15	436	.59	400	.06	.010	1.4
AUG [illegible]...	2.7	200	160	41	.4	17	518	.70	379	.00	.000	.50
SEP [illegible]...	2.6	170	210	34	.4	17	469	.64	404	.70	.010	.43

09306300 WHITE RIVER ABOVE RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	PERIPHYTON BIOMASS ASH WEIGHT G/SQ M	PERIPHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	BIOMASS CHLOROPHYLL RATIO PERIPHYTON (UNITS)	CHLOR-A PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)	CHLOR-B PERIPHYTON CHROMOGRAPHIC FLUOROM (MG/M2)
OCT 29...	.93	.94	.050	1800	20	2.9	--	--	--	--	--	--
NOV 28...	.70	.85	.040	70	10	14	13	--	--	--	--	--
DEC 19...	.29	.51	.020	50	10	2.2	3.6	--	--	--	--	--
JAN 24...	.32	.55	.050	60	<10	--	8.0	--	--	--	--	--
FEB 22...	3.60	4.1	1.40	100	170	28	15	--	--	--	--	--
MAR 26...	1.20	1.3	.200	80	520	7.7	8.0	--	--	--	--	--
APR 21...	2.80	3.2	.950	70	10	27	7.7	--	--	--	--	--
JUN 10...	.94	1.1	.270	30	20	8.8	6.5	--	--	--	--	--
JUL 15...	1.40	1.4	.100	60	20	10	5.7	--	--	--	--	--
AUG 13...	.50	.50	.040	120	30	7.1	6.9	10.8	12.1	287	4.53	1.02
SEP 18...	.44	.44	.050	90	40	4.3	6.9	--	--	--	--	--

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)
OCT 29...	1035	--	--	--	--	--	--	--	--	--
JUN 10...	1215	3000	20	2	2	100	30	0	<1	1
SEP 18...	1310	360	10	2	2	100	40	0	<1	0

DATE	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)
OCT 29...	--	--	--	--	--	--	--	--	--
JUN 10...	2	0	0	3	<3	13	7	9	7
SEP 18...	<1	10	0	2	<3	3	2	2	1

BEST DOCUMENT AVAILABLE

09306300 WHITE RIVER ABOVE RANGELY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
OCT									
29...	--	20	--	5	--	--	--	--	--
JUN									
10...	10	6	190	3	.0	.0	0	< 10	10
SEP									
18...	20	10	40	5	.1	.0	3	< 10	6

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)
OCT									
29...	--	--	--	--	920	--	--	--	--
JUN									
10...	8	1	1	310	300	2.0	10	< 3	.00
SEP									
18...	0	1	1	750	860	3.0	30	4	.01

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
11...	1040	301	61	50	--
29...	1145	470	103	131	--
NOV					
14...	1000	294	82	65	--
DEC					
19...	1300	369	49	49	--
JAN					
09...	1145	408	32	35	--
24...	1340	322	33	29	--
MAR					
13...	1530	351	547	518	96
APR					
03...	1410	400	185	200	--
10...	1200	485	350	458	--
APR					
23...	1100	890	2270	5460	--
MAY					
06...	1015	1120	808	2440	--
14...	1900	1510	1150	4690	--
24...	2000	3130	2060	17400	--
31...	1400	2200	706	4190	--
AUG					
06...	1400	373	132	133	--
16...	1200	460	521	647	--
23...	1820	460	1700	2110	--
30...	1200	340	169	155	--
SEP					
06...	0905	340	590	542	--

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE, UT

LOCATION.--Lat 40°00'50", long 109°04'48", in NW¼NE¼NE¼ sec.27, T.9 S., R.25 E., Uintah County, Hydrologic Unit 14050007, on right bank 900 ft (270 m) upstream from small right bank tributary, 2.7 mi (4.3 km) downstream from Colorado-Utah State line, and 7.5 mi (12.1 km) upstream from Evacuation Creek.

DRAINAGE AREA.--3,680 mi² (9,530 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,030 ft (1,533 m) from topographic map.

REMARKS.--Water-discharge records good except those for winter period, which are fair. Diversions for irrigation of about 31,900 acres (129 km²) above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,470 ft³/s (127 m³/s) May 30, 1979, gage height, 7.20 ft (2.195 m); minimum, 10 ft³/s (0.28 m³/s) July 2, 3, 4, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,330 ft³/s (94.3 m³/s) May 25, gage height, 6.19 ft (1.887 m); minimum, 129 ft³/s (3.65 m³/s) Dec. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	281	456	190	350	330	666	413	1170	2460	1070	354	345
2	282	419	224	340	360	564	403	1120	2410	1170	332	362
3	281	431	283	330	380	556	424	1020	2290	1440	331	357
4	295	451	420	330	400	490	418	1010	2250	1320	324	337
5	303	459	430	320	390	573	415	1080	2330	1100	326	347
6	319	461	430	360	380	614	448	1140	2510	981	317	342
7	336	451	430	370	370	569	487	1360	2600	895	304	347
8	343	448	420	370	360	591	461	1550	2650	836	293	327
9	324	459	370	380	360	623	413	1590	2710	788	270	359
10	326	453	350	380	380	490	419	1680	2670	718	297	424
11	338	453	350	310	420	481	476	1700	2700	690	314	516
12	338	443	350	340	470	473	445	1990	2820	672	270	426
13	352	433	360	380	500	473	424	2000	2960	623	246	404
14	360	406	350	380	600	438	411	1730	2980	627	234	430
15	392	406	350	370	698	518	438	1590	2810	670	281	403
16	393	415	360	370	734	562	491	1540	2590	614	395	403
17	371	430	360	370	893	490	527	1760	2340	563	420	413
18	380	435	370	360	960	421	553	1870	2190	541	429	409
19	389	438	370	360	1100	414	582	1680	2080	521	415	398
20	438	456	370	350	1300	471	655	1680	2070	497	376	389
21	489	431	370	350	1220	475	724	1880	1910	490	368	386
22	546	459	360	340	892	513	818	2180	1850	464	311	405
23	523	352	360	330	659	565	951	2610	1790	405	285	395
24	489	310	350	330	547	504	973	3030	1710	383	391	402
25	496	403	340	330	490	490	963	3110	1600	406	806	376
26	503	504	330	330	481	504	909	2230	1520	412	648	373
27	496	473	310	330	486	484	925	2340	1430	405	456	362
28	485	420	380	330	564	444	916	2340	1320	372	392	363
29	488	324	380	320	676	428	969	2530	1200	364	376	363
30	496	274	360	320	---	414	1080	2640	1120	338	356	352
31	492	---	350	320	---	413	---	2410	---	341	341	---
TOTAL	12344	12753	11027	10750	17400	15711	18531	57580	65870	20716	11258	11515
MEAN	398	425	356	347	600	507	618	1857	2196	668	363	384
MAX	546	504	430	380	1300	666	1080	3110	2980	1440	806	516
MIN	281	274	190	310	330	413	403	1010	1120	338	234	327
AC-FT	24480	25300	21870	21320	34510	31160	36760	114200	130700	41090	22330	22840

CAL YR 1979 TOTAL 279873 MEAN 767 MAX 4230 MIN 190 AC-FT 555100
WTR YR 1980 TOTAL 265455 MEAN 725 MAX 3110 MIN 190 AC-FT 526500

BEST DOCUMENT AVAILABLE

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year. Prior to 1979 water year, published in "Hydrologic and Climatologic Data" reports for Utah.
SPECIFIC CONDUCTANCE: October 1976 to September 1979, daily.
WATER TEMPERATURES: October 1976 to September 1979, daily.
SUSPENDED-SEDIMENT DISCHARGE: October 1976 to current year, once daily, during part of each year.

REMARKS.--Sediment loads computed on U.S.P.S. 69 pumping sediment sampler concentrations for days where concentrations are given. All other days computed using sediment-rating curves.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded (more than 20-percent missing record), 1,570 micromhos July 22, 1977; minimum recorded, 228 micromhos June 14, 15, 1979.
WATER TEMPERATURES: Maximum recorded (more than 20-percent missing record), 31.0°C Aug. 9, 1978; minimum, 0.0°C on many days during winter months.
SEDIMENT LOADS: Maximum daily, 412,000 tons (374,000 t) Sept. 8, 1978; minimum daily, 1.0 ton (0.91 t) July 2, 3, 1977.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT LOADS: Maximum recorded daily, 48,600 tons (44,100 t) May 24; minimum recorded daily, 128 tons (116 t) Aug. 13.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT								
09...	1700	329	760	8.3	15.0	8.1	290	110
NOV								
13...	1600	431	710	8.3	3.0	11.6	270	140
JAN								
08...	1430	356	810	7.8	.0	11.8	260	75
MAR								
14...	1200	450	1000	8.3	4.5	9.6	340	130
APR								
04...	1130	404	1000	7.8	5.5	10.4	350	150
MAY								
21...	1530	1700	560	7.9	16.5	7.8	200	51
JUN								
06...	1400	2480	380	7.8	14.5	8.1	140	14
JUL								
22...	1500	466	750	8.3	23.0	7.2	270	58
AUG								
27...	1600	435	970	7.8	20.5	--	320	110
SEP								
18...	1430	404	780	8.3	16.0	8.0	260	84

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT									
09...	73	27	60	1.5	2.5	180	190	41	.4
NOV									
13...	68	25	55	1.5	1.7	130	160	34	.3
JAN									
08...	66	22	57	1.6	1.5	180	160	37	.2
MAR									
14...	77	35	100	2.4	2.6	210	260	49	.2
APR									
04...	80	36	82	1.9	2.2	200	240	46	.3
MAY									
21...	46	21	36	1.1	1.7	150	120	10	.2
JUN									
06...	38	12	19	.7	1.2	130	57	7.3	.1
JUL									
22...	66	25	57	1.5	2.5	210	150	29	.4
AUG									
27...	79	30	72	1.8	3.7	210	210	38	.4
SEP									
18...	63	26	59	1.6	1.8	180	170	34	.3

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)
OCT 09...	12	514	.70	457	.03	--	.010	70
NOV 13...	14	436	.59	507	.02	.010	--	70
JAN 08...	14	467	.64	449	.27	--	.000	50
MAR 14...	13	664	.90	807	.12	.020	--	70
APR 04...	14	621	.84	677	.04	--	.010	70
MAY 21...	13	340	.46	1560	.31	.020	--	60
JUN 06...	11	227	.31	1520	.73	--	--	--
JUL 22...	14	470	.64	591	.00	.020	.000	60
AUG 27...	14	573	.78	673	.00	.020	--	120
SEP 18...	12	474	.64	517	.00	.010	--	60

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 09...	1700	--	--	--	--	--	20	--	3	--	--	--
JAN 08...	1430	--	--	--	--	--	< 10	--	2	--	--	--
APR 04...	1130	--	--	--	--	--	30	--	2	--	--	--
JUN 06...	1400	100	1	< 1	0	10	--	0	--	.0	1	20
JUL 22...	1500	--	--	--	--	--	20	--	3	--	--	--
SEP 18...	1430	10	1	1	0	3	--	0	--	.0	1	< 3

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
FEB 22...	1230	1190	2490	8000	51	63	69	79	85	99	100
MAR 14...	1230	450	598	727	45	59	76	87	92	100	--
APR 04...	1045	403	334	363	43	52	73	85	88	99	100
15...	--	445	233	280	45	50	73	88	90	98	100
MAY 07...	1500	1580	5540	23600	23	29	48	88	96	100	--
22...	1500	2100	3510	19900	33	38	50	89	99	100	--
JUN 06...	1400	2480	1760	11800	20	25	31	57	85	99	100
30...	1430	1150	543	1690	13	19	22	32	63	97	100
AUG 27...	1530	436	1960	2310	46	58	82	96	97	100	--

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	281			456			190		
2	282			419			224		
3	281			431			283		
4	295			451			420		
5	303			459			430		
6	319			461			430		
7	336			451			430		
8	343			448			420		
9	324			459			370		
10	326			453			350		
11	338			453			350		
12	338			443			350		
13	352			433			360		
14	360			406			350		
15	392			406			350		
16	393			415			360		
17	371			430			360		
18	380			435			370		
19	389			438			370		
20	438			456			370		
21	489			431			370		
22	546			459			360		
23	523			352			360		
24	489			310			350		
25	496			403			340		
26	503			504			330		
27	496			473			310		
28	485			420			380		
29	488			324			380		
30	496			274			360		
31	492			---			350		
TOTAL	12344		4930	12753		4380	11027		3990

BEST DOCUMENT AVAILABLE

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	350			330			666		
2	340			360			564		
3	330			380			556		
4	330			400			490		
5	320			390			573		
6	360			380			614		
7	370			370			569		
8	370			360			591		
9	380			360			623		
10	380			380			490		
11	310			420			481		
12	340			470			473		
13	380			500			473		
14	380			600			438		
15	370			698			518		
16	370			734			562		
17	370			893			490		
18	360			960			421		
19	360			1100			414		
20	350			1300			471		
21	350			1220			475		
22	340			892			513		
23	330			659			565		
24	330			547			504		
25	330			490			490		
26	330			481			504		
27	330			486			484		
28	330			564			444		
29	320			676			428		
30	320			---			414		
31	320			---			413		
TOTAL	10750		10790	17400		92630	15711		32570

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	413	---	396	1170	3180	10000	2460		
2	403	---	370	1120	2500	7560	2410		
3	424	---	424	1020	2920	8040	2290		
4	418	---	406	1010	2290	6240	2250		
5	415	---	398	1080	3320	9680	2330		
6	448	---	433	1140	3250	10000	2510		
7	487	---	450	1380	6620	24700	2600		
8	461	---	401	1550	6500	27200	2650		
9	413	---	346	1590	5350	23000	2710		
10	419	---	362	1680	6050	27400	2670		
11	476	---	395	1700	5720	26300	2700		
12	445	---	352	1990	8220	44200	2820		
13	424	---	312	2000	7520	40600	2960		
14	411	---	283	1730	6000	28000	2980		
15	438	---	291	1590	4860	20900	2810		
16	491	594	787	1540	4950	20600	2590		
17	527	1240	1760	1760	6030	28700	2340		
18	553	1500	2240	1870	5100	25700	2190		
19	582	2390	3760	1680	3900	17700	2080		
20	655	2140	3780	1680	3300	15000	2070		
21	724	2230	4360	1880	3020	15300	1910		
22	818	2520	5570	2180	4460	26300	1850		
23	951	2980	7650	2610	5900	41600	1790		
24	973	2630	6910	3030	5940	48600	1710		
25	963	1550	4030	3110	4640	39000	1600		
26	909	1620	3980	2230	3380	20400	1520		
27	925	1370	3420	2340	3960	25000	1430		
28	916	1370	3390	2340	3440	21700	1320		
29	969	1650	4320	2530	3930	26800	1200		
30	1080	2580	7520	2640	3700	26400	1120		
31	---	---	---	2410	2950	19200	---		
TOTAL	18531	---	69096	57580	---	731820	65870		368600

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	1070	---	2120	354	216	206	345	346	322
2	1170	---	2890	332	208	186	362	324	317
3	1440	---	4570	331	216	193	357	280	270
4	1320	---	2920	324	200	175	337	228	207
5	1100	---	1690	326	177	156	347	231	216
6	981	---	1270	317	207	177	342	228	211
7	895	---	1090	304	207	170	347	234	219
8	836	---	975	293	218	172	327	372	328
9	788	---	862	270	228	166	359	446	432
10	718	---	921	297	217	174	424	3000	3430
11	690	---	686	314	235	199	516	13600	18900
12	672	---	639	270	193	141	426	2940	3380
13	623	---	555	246	193	128	404	1080	1180
14	627	---	508	234	210	133	430	518	601
15	670	---	506	281	247	187	403	330	359
16	614	---	428	395	2460	2620	403	288	313
17	563	---	383	420	2600	2950	413	280	312
18	541	---	324	429	845	979	409	252	278
19	521	---	345	415	429	481	398	240	258
20	497	---	322	376	276	280	389	224	235
21	490	---	311	368	240	238	386	208	217
22	464	---	293	311	180	151	405	206	225
23	405	256	280	285	9000	6930	395	198	211
24	383	297	307	391	19800	20900	402	200	217
25	406	292	320	806	19800	43100	376	182	185
26	412	900	1000	648	18400	32200	373	170	171
27	405	1190	1300	456	4620	5690	362	168	164
28	372	382	384	392	2280	2410	363	168	165
29	364	269	264	376	693	704	363	158	155
30	338	240	219	356	484	465	352	158	150
31	341	235	216	341	407	375	---	---	---
TOTAL	20716	---	28898	11258	---	123036	11515	---	33628
YEAR	265455		986478						

09339900 EAST FORK SAN JUAN RIVER ABOVE SAND CREEK, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 39°23'23", long 106°50'26", Archuleta County, Hydrologic unit 14080101, on right bank 0.3 mi (0.5 km) upstream from Sand Creek, 4.0 mi (6.4 km) upstream from West Fork San Juan River, and 13 mi (21 km) northeast of Pagosa Springs.

DRAINAGE AREA.--64.1 mi² (166.0 km²).

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1959, published as San Juan River above Sand Creek, near Pagosa Springs.

REVISED RECORDS.--WSP 1713: 1957.

GAGE.--Water-stage recorder. Altitude of gage is 8,900 ft (2,713 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 500 acres (2.0 km²) of hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--24 years, 85.2 ft³/s (2.413 m³/s), 61,730 acre-ft/yr (76.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,260 ft³/s (64.0 m³/s) Sept. 14, 1970, gage height, 6.75 ft (2.057 m), from rating curve extended above 460 ft³/s (13 m³/s), on basis of slope-area measurement at gage height 6.13 ft (1.868 m); minimum daily determined, 3.4 ft³/s (0.096 m³/s) Dec. 26, 1958.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft³/s (14 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 23	2130	770	21.8	4.93	1.503	June 9	2330	*884	25.0	5.25	1.600

Minimum daily discharge, 6.5 ft³/s (0.18 m³/s) Nov. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	10	8.0	8.0	9.0	15	15	148	480	325	34	26
2	14	10	8.5	8.0	10	15	14	126	450	298	32	24
3	14	9.4	9.5	7.5	10	14	15	128	480	262	33	22
4	14	10	9.5	7.5	10	14	15	152	535	218	32	21
5	13	9.8	9.5	7.5	10	13	16	190	608	187	31	20
6	13	9.4	10	8.0	10	13	18	218	566	163	30	20
7	13	9.8	11	8.5	9.5	13	20	294	515	163	28	24
8	13	10	11	9.0	9.0	13	22	365	560	181	30	24
9	13	10	10	8.0	8.0	12	23	290	722	152	28	30
10	13	9.8	10	7.0	8.5	12	26	230	734	138	26	110
11	12	9.8	10	7.5	9.0	13	29	230	734	126	24	144
12	12	9.8	9.0	8.5	9.5	13	25	198	716	113	25	72
13	12	9.1	8.5	9.0	10	12	23	163	662	105	26	56
14	12	9.1	7.5	10	11	14	26	158	590	107	34	46
15	12	9.4	8.5	11	11	16	33	166	530	88	40	41
16	12	9.1	9.0	9.0	11	16	47	145	535	78	32	37
17	12	8.8	9.0	8.5	11	15	60	160	510	71	28	33
18	12	8.8	8.0	8.5	11	16	77	187	540	64	24	30
19	12	9.1	8.5	8.5	11	17	122	250	515	62	22	28
20	15	9.4	9.0	8.5	11	16	158	335	480	56	21	26
21	22	9.1	9.5	8.0	11	16	172	450	420	51	19	25
22	15	9.4	9.5	8.5	11	17	226	614	400	49	18	23
23	14	8.5	9.5	8.5	11	17	234	680	395	51	95	22
24	14	8.0	9.0	8.5	11	17	169	560	390	52	77	22
25	13	10	9.5	9.0	11	17	122	430	385	47	85	20
26	13	11	9.5	10	12	18	115	360	375	43	54	20
27	13	8.0	9.5	9.5	13	16	111	370	355	39	43	20
28	12	6.5	9.0	8.5	14	16	133	420	350	36	37	19
29	13	7.0	9.5	7.5	15	17	163	455	320	35	33	18
30	13	7.5	8.5	8.0	---	17	175	460	320	34	31	17
31	11	---	8.0	8.5	---	15	---	475	---	33	29	---
TOTAL	410	275.6	285.0	262.5	308.5	465	2404	9407	15172	3427	1103	1040
MEAN	13.2	9.19	9.19	8.47	10.6	15.0	80.1	303	506	111	35.6	34.7
MAX	22	11	11	11	15	18	234	680	734	325	95	144
MIN	11	6.5	7.5	7.0	8.0	12	14	126	320	33	18	17
AC-FT	813	547	565	521	612	922	4770	18660	30090	6800	2190	2060

CAL YR 1979 TOTAL 50483.6 MEAN 138 MAX 1020 MIN 6.5 AC-FT 100100
WTR YR 1980 TOTAL 34559.6 MEAN 94.4 MAX 734 MIN 6.5 AC-FT 68550

NOTE.--NO GAGE-HEIGHT RECORD NOV. 23 TO MAR. 20.

09340000 EAST FORK SAN JUAN RIVER NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°22'10", long 106°53'30", in NW¼SW¼ sec.7, T.36 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on right bank 0.2 mi (0.3 km) upstream from private highway bridge, 0.5 mi (0.8 km) upstream from West Fork, and 9.5 mi (15.3 km) northeast of Pagosa Springs.

DRAINAGE AREA.--86.9 mi^2 (225.1 km^2).

PERIOD OF RECORD.--May 1935 to September 1980 (discontinued). Prior to October 1959, published as San Juan River near Pagosa Springs.

GAGE.--Water-stage recorder. Datum of gage is 7,597.63 ft (2,315.758 m), National Geodetic Vertical Datum of 1929. Prior to Sept. 8, 1938, at site 0.2 mi (0.3 km) downstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 500 acres (2.0 km^2) of hay meadows above station and a few small hay meadows below station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--45 years, 119 ft^3/s (3.370 m^3/s), 86,220 acre-ft/yr (106 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,460 ft^3/s (69.7 m^3/s) Sept. 14, 1970, gage height, 4.85 ft (1.478 m); maximum gage height, 5.08 ft (1.548 m) Sept. 6, 1970; minimum daily discharge, 5.5 ft^3/s (0.16 m^3/s) Dec. 20, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft^3/s (17 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
May 23	2130	979	27.7	3.72	1.134	June 9	2330	*1,180	33.4	4.09	1.247

Minimum daily discharge, 8.5 ft^3/s (0.24 m^3/s) Nov. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	12	11	11	14	22	21	212	576	460	56	32
2	18	12	12	12	13	22	20	176	525	408	52	29
3	18	18	13	10	14	20	20	176	594	364	54	28
4	18	11	13	10	14	20	21	221	690	318	49	26
5	17	12	13	11	14	18	25	273	702	277	48	26
6	16	11	13	12	14	19	29	305	708	244	47	27
7	16	12	14	12	14	18	34	386	672	237	43	36
8	16	12	15	13	13	18	36	465	720	269	47	44
9	16	12	14	12	11	16	42	400	930	230	42	46
10	16	12	14	9.3	12	16	52	346	993	209	39	172
11	15	12	14	12	12	16	60	336	986	197	36	186
12	15	10	13	16	13	19	43	318	916	179	36	97
13	15	11	12	14	14	17	37	269	881	165	49	76
14	15	11	10	16	15	18	44	269	804	170	51	62
15	15	11	11	18	16	22	72	277	714	145	60	54
16	15	11	12	14	16	23	97	262	690	133	46	48
17	15	11	12	12	16	21	117	301	684	121	38	42
18	16	12	11	12	17	21	143	364	755	115	33	39
19	16	13	12	12	22	24	188	426	776	109	31	36
20	16	14	13	12	22	23	221	520	727	101	29	33
21	42	14	13	11	17	26	244	660	642	93	26	31
22	21	10	13	12	16	30	301	804	612	89	25	30
23	20	12	13	12	16	28	297	867	612	91	125	28
24	19	10	12	12	15	27	224	734	606	93	103	27
25	18	15	13	13	15	27	170	582	600	83	121	26
26	16	16	14	15	16	24	160	515	582	80	78	25
27	15	12	13	13	18	24	162	510	564	72	60	24
28	14	8.5	12	12	19	22	196	540	505	66	49	24
29	14	9.0	13	11	20	21	237	576	470	61	44	23
30	14	10	12	9.0	---	20	258	588	455	60	40	22
31	14	---	11	13	---	21	---	588	---	55	37	---
TOTAL	529	356.5	391	383.3	448	664	3569	13266	20691	5294	1596	1397
MEAN	17.1	11.9	12.6	12.4	15.4	21.4	119	428	690	171	51.4	46.6
MAX	42	18	15	18	22	30	301	867	993	460	125	186
MIN	14	8.5	10	9.0	11	16	20	176	455	55	25	22
AC-FT	1050	707	776	760	889	1320	7080	26310	41040	10500	3160	2770

CAL YR 1979 TOTAL 73603.5 MEAN 202 MAX 1350 MIN 8.5 AC-FT 146000
WTR YR 1980 TOTAL 48582.8 MEAN 133 MAX 993 MIN 8.5 AC-FT 96360

09342500 SAN JUAN RIVER AT PAGOSA SPRINGS, CO

LOCATION.--Lat 37°15'58", long 107°00'37", in NE¼SW¼ sec.13, T.35 N., R.2 W., Archuleta County, Hydrologic Unit 14080101, on right bank at former bridge site in Pagosa Springs, 0.2 mi (0.3 km) upstream from McCabe Creek, 0.6 mi (1.0 km) downstream from bridge on U.S. Highway 160, and 2.0 mi (3.2 km) upstream from Mill Creek.

DRAINAGE AREA.--298 mi² (772 km²).

PERIOD OF RECORD.--October 1910 to December 1914, May 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1914(M).

GAGE.--Water-stage recorder. Datum of gage is 7,052.04 ft (2,149.462 m), National Geodetic Vertical Datum of 1929. Jan. 29 to Mar. 6, 1911, nonrecording gage at site 0.5 mi (0.8 km) upstream at different datum. Mar. 7 to Oct. 4, 1911, nonrecording gage at present site at different datum. Nov. 23, 1911, to Nov. 14, 1914, nonrecording gage at site 300 ft (91 m) downstream at different datum.

REMARKS.--Records good. Diversions for irrigation of large areas above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--49 years, 369 ft³/s (10.45 m³/s) 267,300 acre-ft/yr (330 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s (708 m³/s) Oct. 5, 1911, gage height, 17.8 ft (5.43 m), from floodmarks, from velocity-area study; minimum daily, 9.7 ft³/s (0.27 m³/s) Oct. 5, 6, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1845, that of Oct. 5, 1911. Flood of June 29, 1927, reached a stage of 13.5 ft (4.11 m), discharge about 16,000 ft³/s (453 m³/s), from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 22	1930	1,840	52.1	4.75	1.448	June 10	0100	*4,010	114	6.52	1.987
May 8	0630	2,010	56.9	4.90	1.494	Sept.11	0200	1,510	42.8	4.59	1.399

Minimum daily discharge, 27 ft³/s (0.76 m³/s) Jan. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	50	42	41	52	85	70	1020	2020	1600	106	94
2	44	46	46	53	51	80	82	868	1930	1420	105	80
3	42	47	52	38	52	80	77	828	1980	1240	112	76
4	39	53	53	40	56	77	85	903	2220	1090	112	70
5	40	47	52	41	52	72	118	1030	2430	966	97	70
6	40	46	51	46	53	71	163	1150	2530	847	95	71
7	40	48	51	47	60	65	185	1420	2360	774	85	92
8	40	50	58	47	56	62	187	1790	2410	816	101	80
9	40	53	55	48	41	62	216	1510	3000	714	101	101
10	40	48	53	41	46	61	279	1190	3430	645	85	558
11	40	46	55	27	47	71	304	1100	3250	595	80	803
12	40	37	57	42	48	70	241	1020	3290	535	74	360
13	39	40	45	55	51	64	224	828	3090	480	70	262
14	40	45	39	60	57	66	268	828	2880	465	85	222
15	40	44	44	68	60	82	420	910	2590	400	126	190
16	40	42	48	66	64	87	560	834	2370	356	110	165
17	40	42	48	60	65	78	672	924	2360	320	87	147
18	40	48	42	56	64	82	834	1040	2600	290	76	134
19	41	48	44	55	83	88	966	1180	2640	265	68	122
20	44	56	48	53	83	87	1070	1490	2490	250	61	114
21	139	56	52	40	72	101	1220	1850	2240	230	58	110
22	87	37	50	44	66	116	1550	2330	2150	211	55	103
23	80	46	51	45	62	110	1320	2520	2190	185	252	99
24	77	39	46	44	53	103	1020	2310	2230	192	256	95
25	72	54	45	46	55	103	806	1810	2170	177	262	92
26	70	64	52	51	58	92	792	1670	2090	172	192	85
27	65	56	48	55	65	94	804	1660	2030	149	156	85
28	64	33	47	53	72	85	910	1760	1920	132	134	83
29	61	33	51	40	82	78	1020	1910	1710	120	118	83
30	61	38	48	34	---	78	1120	1950	1630	116	106	80
31	57	---	41	50	---	83	---	2040	---	110	105	---
TOTAL	1647	1396	1515	1486	1726	2533	17581	43673	72230	15862	3530	4726
MEAN	53.1	46.5	48.9	47.9	59.5	81.7	586	1409	2408	512	114	158
MAX	139	64	58	68	83	116	1550	2520	3430	1600	262	803
MIN	39	33	39	27	41	61	70	828	1630	110	55	70
AC-FT	3270	2770	3010	2950	3420	5020	34870	86630	143300	31460	7000	9370

CAL YR 1979 TOTAL 250963 MEAN 688 MAX 4220 MIN 33 AC-FT 497800
WTR YR 1980 TOTAL 167905 MEAN 459 MAX 3430 MIN 27 AC-FT 333000

09343300 RIO BLANCO BELOW BLANCO DIVERSION DAM, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°12'11", long 106°48'45", in NW¼ sec.11, T.34 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on left bank 250 ft (76 m) downstream from Blanco Diversion Dam, 1.1 mi (1.8 km) downstream from Leche Creek, and 12 mi (19.2 km) southeast of Pagosa Springs.

DRAINAGE AREA.--69.1 mi² (177.2 km²).

PERIOD OF RECORD.--March 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,848.81 ft (2,392.3 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS.--Flows controlled by diversion dam upstream.

COOPERATION.--Records collected and computed by Water and Power Resources Service.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 1,200 ft³/s (34.0 m³/s) May 19, 1972; minimum daily, 6.9 ft³/s (0.20 m³/s) Dec. 29, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,000 ft³/s (28.3 m³/s) June 9, gage height, 4.74 ft (1.445 m); minimum daily, 7.2 ft³/s (0.20 m³/s) Mar. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	13	21	17	17	20	18	40	74	59	21	24
2	17	12	26	20	18	18	19	40	56	46	21	20
3	17	13	26	16	20	18	18	40	99	37	21	18
4	17	13	17	17	19	18	20	42	115	32	21	17
5	17	13	16	18	23	17	24	46	156	37	21	16
6	17	13	14	20	32	16	25	55	152	29	21	17
7	17	14	15	20	26	15	23	93	89	40	21	26
8	17	14	16	19	20	12	19	146	184	37	20	36
9	17	16	17	19	11	12	18	71	405	29	20	40
10	17	16	19	12	14	12	18	45	466	28	20	97
11	17	16	18	20	14	11	18	42	332	30	21	21
12	13	13	16	19	17	7.9	18	42	302	31	21	21
13	13	13	11	21	21	7.2	18	40	284	28	21	21
14	14	14	12	22	20	12	29	42	254	30	20	21
15	14	14	14	19	17	11	21	42	169	24	21	21
16	14	15	15	16	14	12	20	42	124	21	21	21
17	14	15	15	17	16	13	18	42	136	21	20	21
18	14	16	18	16	17	11	18	45	203	21	21	21
19	14	17	25	16	20	19	20	64	218	21	21	21
20	16	16	28	15	16	20	54	76	149	21	21	21
21	40	16	21	12	14	24	66	257	112	21	21	21
22	26	14	14	15	14	28	50	312	120	23	21	21
23	23	20	14	16	11	27	56	233	106	23	32	20
24	32	14	14	31	9.7	25	26	173	110	21	31	20
25	20	16	16	23	9.7	25	19	58	121	22	31	19
26	19	16	15	26	10	24	18	57	102	22	32	18
27	17	14	16	20	10	24	21	66	117	21	38	18
28	16	13	16	17	17	23	30	77	82	23	38	19
29	16	18	16	14	22	21	44	83	39	21	33	18
30	16	20	16	16	---	21	44	93	52	21	31	16
31	16	---	14	17	---	21	---	99	---	21	27	---
TOTAL	554	447	531	566	489.4	545.1	810	2603	4928	861	750	711
MEAN	17.9	14.9	17.1	18.3	16.9	17.6	27.0	84.0	164	27.8	24.2	23.7
MAX	40	20	28	31	32	28	66	312	466	59	38	97
MIN	13	12	11	12	9.7	7.2	18	40	39	21	20	16
AC-FT	1100	887	1050	1120	971	1080	1610	5160	9770	1710	1490	1410

CAL YR 1979 TOTAL 17883.0 MEAN 49.0 MAX 602 MIN 11 AC-FT 35470
WTR YR 1980 TOTAL 13795.5 MEAN 37.7 MAX 466 MIN 7.2 AC-FT 27360

09344000 NAVAJO RIVER AT BANDED PEAK RANCH, NEAR CHROMO, CO

LOCATION.--Lat 37°05'07", long 106°41'20", in NW¼ sec.24, T.33 N., R.2 E., Archuleta County, Hydrologic Unit 14080101, on left bank at downstream side of private bridge on Banded Peak Ranch, 0.5 mi (0.8 km) downstream from Aspen Creek, 4.0 mi (6.4 km) downstream from East Fork, and 9 mi (14 km) northeast of Chromo.

DRAINAGE AREA.--69.8 mi² (181 km²).

PERIOD OF RECORD.--October 1936 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 7,940.6 ft (2,420.29 m) National Geodetic Vertical Datum of 1929 (river-profile survey). Prior to Oct. 1, 1949, at datum 3.00 ft (0.914 m) higher.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 430 acres (1.74 km²) above station. Several observations of water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Records collected and computed by Colorado Division_of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--44 years, 105 ft³/s (2.974 m³/s), 76,070 acre-ft/yr (93.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,480 ft³/s (41.9 m³/s) June 9, 1980, gage height, 4.55 ft (1.387 m), from rating curve extended above 840 ft³/s (24 m³/s), on basis of float-area measurement at gage height 4.44 ft (1.353 m); maximum gage height, 7.02 ft (2.140 m) present datum, May 13, 1941; minimum daily discharge, 8.4 ft³/s (0.24 m³/s) Sept. 29, 1960, result of temporary blockage by channel alteration upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,480 ft³/s (41.9 m³/s) at 2200 June 9, gage height, 4.55 ft (1.387 m), from rating curve extended above 840 ft³/s (24 m³/s), only peak above base of 500 ft³/s (14 m³/s); minimum daily, 26 ft³/s (0.74 m³/s) Nov. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	32	27	30	29	32	33	235	561	511	82	48
2	36	32	28	30	30	32	33	216	538	484	80	42
3	36	32	30	31	30	33	32	232	567	430	88	37
4	36	34	30	30	30	33	33	289	634	390	81	37
5	35	33	29	30	30	32	35	354	674	336	70	40
6	34	32	29	30	30	32	35	395	660	289	76	43
7	33	34	29	30	31	32	34	445	609	286	68	47
8	33	34	28	29	30	32	36	500	660	297	65	54
9	34	33	28	29	29	32	39	415	946	278	68	91
10	33	32	29	29	28	33	44	336	1070	256	61	327
11	33	32	29	30	29	32	47	318	1080	246	56	247
12	33	31	29	31	31	32	43	278	1040	226	73	123
13	33	30	28	32	32	32	42	239	950	210	72	86
14	34	30	28	32	32	32	46	246	850	201	75	76
15	34	30	29	32	32	32	60	249	750	170	81	65
16	34	29	29	30	32	32	74	223	750	165	69	59
17	34	30	30	29	31	32	88	249	800	155	61	54
18	35	31	30	28	32	33	115	274	900	150	56	50
19	35	32	30	28	38	33	163	336	860	145	49	46
20	36	32	30	28	33	32	242	430	800	137	46	42
21	44	30	30	27	32	34	266	538	706	140	41	41
22	38	28	31	27	33	35	323	686	693	137	36	38
23	38	28	30	27	32	34	289	712	680	128	89	33
24	37	28	30	27	32	33	220	634	706	115	91	35
25	37	30	30	27	32	34	176	516	700	106	130	40
26	36	30	29	28	32	33	165	467	654	98	80	40
27	36	30	29	28	32	33	179	472	648	89	66	39
28	35	26	30	28	33	33	239	506	609	84	60	40
29	36	26	29	28	32	32	278	528	561	82	57	38
30	36	26	29	28	---	32	286	544	550	82	55	34
31	36	---	30	29	---	33	---	561	---	82	52	---
TOTAL	1096	917	906	902	909	1011	3695	12423	22206	6505	2134	1992
MEAN	35.4	30.6	29.2	29.1	31.3	32.6	123	401	740	210	68.8	66.4
MAX	44	34	31	32	38	35	323	712	1080	511	130	327
MIN	33	26	27	27	28	32	32	216	538	82	36	33
AC-FT	2170	1820	1800	1790	1800	2010	7330	24640	44050	12900	4230	3950

CAL YR 1979 TOTAL 64799 MEAN 178 MAX 1120 MIN 22 AC-FT 128500
WTR YR 1980 TOTAL 54696 MEAN 149 MAX 1080 MIN 26 AC-FT 108500

09344400 NAVAJO RIVER BELOW OSO DIVERSION DAM, NEAR CHROMO, CO

LOCATION.--Lat 37°01'48", long 106°44'16", in NE¼ sec.9, T.32 N., R.2 E., Archuleta County, Hydrologic Unit 14080101, on left bank 600 ft (183 m) downstream from Oso Diversion Dam, 5.5 mi (8.8 km) east of Chromo, and 6 mi (9.6 km) upstream from Little Navajo River.

DRAINAGE AREA.--100.5 mi² (260.6 km²).

PERIOD OF RECORD.--March 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,647.71 ft (2,331.0 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS.--Flows controlled by diversion dam upstream.

COOPERATION.--Records collected and computed by Water and Power Resources Service.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 870 ft³/s (24.6 m³/s) May 11, 1973; minimum daily, 14 ft³/s (0.40 m³/s) Jan. 25, Dec. 28, 29, 1976, Sept. 29, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 499 ft³/s (14.1 m³/s) June 9; minimum daily, 14 ft³/s (0.40 m³/s) Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	35	45	40	31	37	34	90	72	59	57	46
2	39	35	44	37	36	37	38	91	59	59	59	39
3	39	35	38	33	36	36	37	91	66	60	58	29
4	39	35	37	36	35	37	40	90	115	58	58	30
5	39	35	35	42	37	35	42	90	166	57	58	32
6	39	35	35	44	32	35	49	91	182	58	58	34
7	38	35	35	40	33	34	47	93	135	58	58	45
8	37	35	35	35	32	32	45	91	182	58	58	57
9	39	35	34	34	29	32	40	91	322	59	58	85
10	39	35	34	24	30	32	38	91	341	59	56	267
11	38	35	34	23	33	36	38	91	323	58	52	202
12	37	35	34	30	35	35	38	90	319	58	67	56
13	37	35	32	37	37	32	38	91	330	58	70	56
14	37	35	32	40	36	34	38	91	282	59	56	56
15	38	35	32	37	36	36	39	91	198	59	56	56
16	37	35	35	34	34	36	39	91	144	58	56	56
17	37	35	34	34	32	33	39	91	131	58	56	56
18	38	35	35	34	37	33	39	91	161	58	56	55
19	38	35	34	33	45	36	38	91	244	58	54	51
20	39	35	34	33	37	36	38	91	216	58	51	44
21	51	48	32	29	35	39	39	99	169	57	46	43
22	39	113	32	30	35	42	68	139	148	57	41	32
23	38	49	32	32	33	40	41	222	142	58	86	23
24	38	29	34	32	32	38	42	143	163	57	90	26
25	38	35	43	36	34	40	38	97	155	57	103	24
26	38	36	32	36	33	37	37	92	121	57	57	22
27	38	35	33	32	35	38	38	91	121	55	66	20
28	38	30	32	32	37	37	38	90	79	66	67	16
29	38	38	32	24	37	36	38	92	60	66	63	14
30	38	44	32	27	---	35	56	90	60	69	60	16
31	38	---	34	34	---	37	---	90	---	65	52	---
TOTAL	1195	1157	1076	1044	1004	1113	1229	3063	5206	1831	1883	1588
MEAN	38.5	38.6	34.7	33.7	34.6	35.9	41.0	98.8	174	59.1	60.7	52.9
MAX	51	113	45	44	45	42	68	222	341	69	103	267
MIN	37	29	32	23	29	32	34	90	59	55	41	14
AC-FT	2370	2290	2130	2070	1990	2210	2440	6080	10330	3630	3730	3150

```
CAL YR 1979  TOTAL  22790   MEAN 62.4   MAX 346   MIN 25   AC-FT  45200
WTR YR 1980  TOTAL  21389   MEAN 58.4   MAX 341   MIN 14   AC-FT  42430
```

BEST DOCUMENT AVAILABLE

09345200 LITTLE NAVAJO RIVER BELOW LITTLE OSO DIVERSION DAM, NEAR CHROMO, CO

LOCATION.--Lat 37°04'32", long 106°48'38", in SW¼ sec.23, T.33 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on right bank at Little Oso Diversion Dam, 3.5 mi (5.6 km) northeast of Chromo, and 4.0 mi (6.4 km) upstream from confluence with Navajo River.

DRAINAGE AREA.--14.2 mi² (36.8 km²).

PERIOD OF RECORD.--June 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,756.10 ft (2,364.1 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS.--Flows controlled by diversion dam upstream.

COOPERATION.--Records collected and computed by Water and Power Resources Service.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 235 ft³/s (6.66 m³/s) May 30, 1979; no flow Apr. 14, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 56 ft³/s (1.59 m³/s) June 4; minimum daily, 1.2 ft³/s (0.034 m³/s) Oct. 6-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	.98	1.3	1.6	1.9	2.1	2.6	18	27	26	3.7	2.6
2	1.4	.98	1.3	1.7	1.9	2.1	2.7	28	27	23	3.3	2.4
3	1.4	1.2	1.6	1.7	1.9	2.1	2.7	28	27	20	3.5	2.4
4	1.4	2.1	2.0	1.7	1.9	2.1	3.4	29	33	18	3.3	2.4
5	1.3	1.5	2.0	1.7	2.0	2.0	5.1	31	41	16	3.0	2.9
6	1.2	1.3	1.9	1.7	1.7	2.0	6.6	29	27	14	3.6	3.2
7	1.2	1.5	1.9	1.7	1.7	2.0	7.0	31	27	14	2.6	2.9
8	1.2	1.6	2.0	1.7	1.7	1.9	5.7	28	27	14	3.8	4.4
9	1.2	1.9	2.0	1.7	1.7	1.9	3.9	28	27	12	3.6	6.3
10	1.2	1.5	2.1	2.0	1.7	2.0	5.3	29	27	11	3.3	25
11	1.2	.98	2.0	2.1	1.6	2.0	4.1	29	27	10	2.6	16
12	1.2	1.2	2.0	2.2	1.6	2.0	4.4	29	27	8.9	7.0	7.0
13	1.3	1.3	1.9	2.2	1.6	1.9	4.3	29	27	8.8	5.2	5.4
14	1.4	1.4	1.7	2.2	1.7	2.1	4.8	29	27	9.2	4.1	4.6
15	1.4	1.3	1.9	2.2	1.9	2.5	5.7	29	27	8.4	4.9	3.9
16	1.4	1.4	1.9	2.1	1.7	2.5	5.7	26	26	6.7	4.6	3.6
17	1.6	1.5	1.9	2.0	1.7	2.2	5.1	29	28	6.1	3.3	3.9
18	1.6	1.5	1.7	2.0	2.0	2.4	5.2	29	27	6.0	2.9	3.3
19	1.5	1.5	1.7	1.9	2.4	2.6	5.3	26	27	5.6	2.6	2.9
20	1.5	1.9	1.7	1.7	2.1	2.8	4.5	26	27	5.1	2.5	2.9
21	2.6	1.6	1.9	1.9	1.9	3.5	6.1	30	27	4.9	2.2	2.8
22	1.9	1.6	2.0	1.9	1.7	4.3	5.5	40	27	4.8	2.4	2.5
23	2.1	1.5	2.0	1.9	1.7	3.3	5.5	48	27	4.9	6.5	2.5
24	2.4	1.5	1.9	1.9	1.6	3.0	4.9	26	27	4.6	8.0	2.5
25	2.0	1.4	1.9	1.9	1.7	2.9	4.9	26	27	4.3	9.0	2.5
26	1.7	2.2	1.9	1.9	1.7	2.9	4.9	26	27	4.1	4.8	2.4
27	1.7	1.6	1.9	1.9	1.6	2.8	5.2	27	27	3.8	3.8	2.4
28	1.6	1.5	1.9	1.9	2.1	2.5	5.6	27	27	3.3	3.2	2.4
29	1.7	1.4	1.7	2.0	2.1	2.4	4.6	27	27	3.2	3.0	2.4
30	1.7	1.3	1.7	2.1	---	2.5	4.7	27	27	3.2	3.0	2.2
31	1.6	---	1.7	2.0	---	2.8	---	28	---	3.0	2.8	---
TOTAL	48.2	44.14	57.0	59.1	52.5	76.1	146.0	892	830	286.9	122.1	132.6
MEAN	1.55	1.47	1.84	1.91	1.81	2.45	4.87	28.8	27.7	9.25	3.94	4.42
MAX	2.6	2.2	2.1	2.2	2.4	4.3	7.0	48	41	26	9.0	25
MIN	1.2	.98	1.3	1.6	1.6	1.9	2.6	18	26	3.0	2.2	2.2
AC-FT	96	88	113	117	104	151	290	1770	1650	569	242	263

CAL YR 1979 TOTAL 2898.64 MEAN 7.94 MAX 56 MIN .98 AC-FT 5750
WTR YR 1980 TOTAL 2746.64 MEAN 7.50 MAX 48 MIN .98 AC-FT 5450

09346000 NAVAJO RIVER AT EDITH, CO

LOCATION.--Lat 37°00'10", long 106°54'25", in NW¼NW¼ sec.24, T.32 N., R.1 W., Archuleta County, Hydrologic Unit 14080101, on right bank 290 ft (88 m) downstream from highway bridge, 0.2 mi (0.3 km) southeast of Edith, 0.5 mi (0.8 km) upstream from Colorado-New Mexico State line, and 1.3 mi (2.1 km) upstream from Coyote Creek.

DRAINAGE AREA.--172 mi² (445 km²).

PERIOD OF RECORD.--September 1912 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1243: 1943, 1945. WSP 1633: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,033.00 ft (2,143.658 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service. Prior to Jan. 1, 1929, nonrecording gage at site 240 ft (73 m) upstream at different datum. June 2, 1935, to June 27, 1941, water-stage recorder at sites 200 and 240 ft (61 and 73 m) upstream at datum 2.0 ft (0.61 m) higher. June 28, 1941, to June 20, 1961, at site 50 ft (15 m) downstream at same datum.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 1,700 acres (6.88 km²) above station. High-water diversions above station into Heron Reservoir through Azotea tunnel began in March 1971. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--58 years (water years 1913-70), 155 ft³/s (4.390 m³/s), 112,300 acre-ft/yr (138 hm³/yr), prior to diversions through Azotea tunnel; 10 years (water years 1971-80) 65.4 ft³/s (1.852 m³/s) 47,380 acre-ft/yr (58.4 hm³/yr), subsequent to diversion thrugh Azotea tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,840 ft³/s (80.4 m³/s) Apr. 23, 1942, gage height, 6.55 ft (1.996 m), from rating curve extended above 1,100 ft³/s (31 m³/s); minimum daily, 8.0 ft³/s (0.23 m³/s) Sept. 25, 1953, Aug. 7, 1977. .

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 5, 1911, exceeded all other observed floods at this location.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 900 ft³/s (25.5 m³/s) Apr. 1, gage height, 4.80 ft (1.463 m); maximum gage height, 5.45 ft (1.661 m) Feb. 26 (backwater from ice); minimum daily discharge, 18 ft³/s (0.51 m³/s) Jan. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	33	26	26	32	50	183	206	100	79	70	65
2	36	33	30	32	30	48	49	202	84	73	73	81
3	36	33	32	26	32	48	46	202	82	82	72	68
4	38	36	34	24	34	46	54	212	121	68	68	52
5	39	36	32	26	32	46	72	212	198	66	63	30
6	32	36	32	28	32	42	96	209	221	72	60	41
7	29	39	32	30	36	40	111	202	157	72	52	50
8	33	41	36	30	30	38	111	206	215	72	58	54
9	35	41	34	30	26	38	123	184	430	73	62	81
10	35	36	32	26	28	38	202	181	421	70	58	315
11	35	36	32	18	28	42	167	174	400	70	60	329
12	35	33	34	28	30	39	125	167	416	66	62	81
13	33	33	28	34	34	36	118	157	433	70	81	81
14	33	33	26	38	36	39	162	157	355	72	63	73
15	33	33	28	42	38	42	253	195	264	66	66	75
16	35	33	30	40	40	44	287	178	151	63	65	82
17	36	33	28	38	40	39	287	167	148	62	65	88
18	38	35	26	36	42	42	303	154	222	62	58	77
19	36	39	28	34	50	46	333	157	266	60	65	63
20	38	38	30	32	50	47	286	154	258	58	62	60
21	52	36	32	26	44	54	294	151	188	55	57	62
22	41	24	30	28	40	62	390	192	180	54	57	58
23	41	28	30	28	38	58	275	329	170	58	81	57
24	39	24	28	26	34	52	202	248	184	57	103	47
25	39	34	30	30	34	55	133	151	210	60	143	50
26	38	38	32	32	38	52	139	133	161	68	86	54
27	36	30	30	34	44	52	142	130	131	68	90	50
28	36	20	30	32	48	50	164	128	117	77	90	58
29	36	22	32	28	50	47	164	125	63	81	90	58
30	36	24	28	22	---	46	181	118	70	79	96	49
31	36	---	26	28	---	50	---	118	---	75	90	---
TOTAL	1130	990	938	932	1070	1428	5452	5499	6416	2108	2266	2389
MEAN	36.5	33.0	30.3	30.1	36.9	46.1	182	177	214	68.0	73.1	79.6
MAX	52	41	36	42	50	62	390	329	433	82	143	329
MIN	29	20	26	18	26	36	46	118	63	54	52	30
AC-FT	2240	1960	1860	1850	2120	2830	10810	10910	12730	4180	4490	4740

CAL YR 1979 TOTAL 30253 MEAN 82.9 MAX 435 MIN 20 AC-FT 60010
WTR YR 1980 TOTAL 30618 MEAN 83.7 MAX 433 MIN 18 AC-FT 60730

09346400 SAN JUAN RIVER NEAR CARRACAS, CO

LOCATION.--Lat 37°00'49", long 107°16'42", in SE¼SW¼ sec.17, T.32 N., R.4 W., Archuleta County, Hydrologic Unit 14080101, on right bank just upstream from flow line of Navajo Reservoir, 3 mi (5 km) northwest of Carracas, 7.2 mi (11.6 km) upstream from Piedra River, and at mile 332.8 (535.5 km).

DRAINAGE AREA.--1,230 mi² (3,190 km²), approximately.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,090 ft (1,856 m), from river-profile map.

REMARKS.--Records good except those for winter period or period of no gage-height record, which are poor. Diversions for irrigation of about 11,000 acres (45 km²) above station. Highwater diversions above station into Rio Grande basin through Azotea tunnel (station 08284160) began in March 1971. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--9 years (water years 1962-70), 632 ft³/s (17.90 m³/s), 457,900 acre-ft/yr (565 hm³/yr), prior to completion of Azotea tunnel.
10 years (water years 1971-80), 576 ft³/s (16.31 m³/s), 417,300 acre-ft/yr (515 hm³/yr) since completion of Azotea tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,730 ft³/s (276 m³/s) Sept. 6, 1970, gage height, 8.34 ft (2.542 m), from rating curve extended above 6,000 ft³/s (170 m³/s), on basis of slope-area measurement of peak flow; minimum daily, about 5 ft³/s (0.1 m³/s) Dec. 10, 1961, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911; June 29, 1927.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft³/s (71 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 22	0530	4,570	129	6.13	1.868	June 10	0630	*5,110	145	6.38	1.945
May 23	0830	3,740	106	5.68	1.731						

Minimum daily discharge, 85 ft³/s (2.41 m³/s) Nov. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	120	100	110	130	330	351	1930	2440	1750	338	185
2	97	106	110	120	130	320	374	1870	2350	1670	320	162
3	97	106	130	100	140	300	374	1660	2350	1530	325	148
4	95	115	130	100	140	290	524	1640	2580	1410	291	132
5	93	113	140	110	120	280	760	1690	2870	1280	220	122
6	95	113	130	110	120	270	1080	1820	3090	1160	190	125
7	89	118	130	120	130	260	1140	1960	2850	1070	176	145
8	87	128	140	120	130	240	994	2440	2820	1120	165	188
9	91	130	140	120	120	220	1150	2170	3550	1050	204	228
10	91	128	130	100	120	230	1460	1810	4310	961	188	464
11	93	115	140	100	130	250	1640	1590	3730	898	173	1390
12	91	108	140	120	130	240	1190	1530	3870	845	167	600
13	93	95	120	140	130	240	1200	1310	3730	774	188	422
14	91	102	100	150	140	290	1170	1260	3440	781	182	356
15	91	108	110	160	170	350	1720	1460	3090	702	198	312
16	93	106	120	160	190	400	2090	1480	2880	644	235	275
17	93	104	120	150	200	340	2270	1450	2700	582	195	249
18	95	108	110	140	210	360	2310	1550	3010	547	179	231
19	97	118	110	130	230	400	2610	1660	3270	524	162	214
20	102	125	120	120	250	450	2740	1960	3190	501	145	204
21	153	115	130	100	260	540	2790	2280	2850	463	138	185
22	224	100	130	110	270	580	3550	3120	2670	448	130	179
23	162	118	130	110	260	520	3140	3320	2610	417	174	167
24	165	100	120	110	260	520	2410	3200	2580	427	490	162
25	159	138	120	120	260	500	1780	2440	2550	407	474	159
26	151	167	130	130	270	410	1720	2170	2400	402	356	156
27	140	148	120	140	300	400	1640	2170	2270	388	296	153
28	135	110	120	130	320	350	1770	2180	2200	369	275	148
29	132	85	130	110	350	330	1930	2370	1900	356	242	145
30	130	90	120	90	---	347	2010	2400	1810	351	218	142
31	128	---	100	120	---	443	---	2440	---	338	207	---
TOTAL	3552	3437	3820	3750	5610	11000	49887	62330	85960	24165	7241	7748
MEAN	115	115	123	121	193	355	1663	2011	2865	780	234	258
MAX	224	167	140	160	350	580	3550	3320	4310	1750	490	1390
MIN	87	85	100	90	120	220	351	1260	1810	338	130	122
AC-FT	7050	6820	7580	7440	11130	21820	98950	123600	170500	47930	14360	15370

CAL YR 1979 TOTAL 383506 MEAN 1051 MAX 5610 MIN 85 AC-FT 760700
WTR YR 1980 TOTAL 268500 MEAN 734 MAX 4310 MIN 85 AC-FT 532600

NOTE.--NO GAGE-HEIGHT RECORD FEB. 22 TO MAR. 29.

09347205 MIDDLE FORK PIEDRA RIVER NEAR DYKE, CO

LOCATION.--Lat 37°27'10", long 107°10'33", in NE¼SW¼ sec.10, T.37 N., R.3 W., Hinsdale County, Hydrologic Unit 14080102, on left bank 1.8 mi (2.9 km) northeast of Piedra Guard Station, 2 mi (3.2 km) downstream from headgate of Toner-Taylor ditch, and 15 mi (24 km) northwest of Pagosa Springs.

DRAINAGE AREA.--34.1 mi^2 (88.3 km^2).

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,860 ft (2,400 m). (Record is not equivalent to record for station 09347200.)

REMARKS.--Records good except those for winter period, which are fair. There is one small diversion above station for irrigation of a few acres of hay meadow below the station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 700 ft^3/s (19.8 m^3/s) May 26, 1978, gage height, 3.63 ft (1.106 m); minimum daily, 2.0 ft^3/s (0.057 m^3/s) Oct. 17-20, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 646 ft^3/s (18.3 m^3/s) at 2200 Sept. 10, gage height, 3.60 ft (1.097 m); minimum daily, 3.4 ft^3/s (0.096 m^3/s) Jan. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	9.0	7.0	6.5	4.7	8.7	10	122	228	225	7.5	18
2	6.8	8.0	7.5	7.0	5.8	8.7	12	109	211	178	9.1	16
3	6.8	8.0	8.5	6.0	6.0	8.3	9.1	113	228	145	10	16
4	6.8	9.5	8.5	6.0	6.0	8.3	9.5	113	268	124	7.5	14
5	6.8	9.0	8.0	5.8	5.5	7.5	11	113	310	109	8.3	14
6	6.8	8.7	8.0	6.4	6.5	7.5	11	135	315	97	8.3	16
7	6.4	7.9	8.5	6.1	6.5	7.2	12	145	276	88	6.8	61
8	6.1	7.9	9.0	6.4	5.5	6.8	12	155	284	86	32	24
9	5.8	8.3	9.0	6.1	4.8	6.8	14	133	395	77	12	34
10	6.1	7.5	8.5	5.8	5.0	7.2	16	111	400	69	9.1	249
11	6.1	7.5	8.0	5.8	5.5	8.3	18	107	440	63	7.9	236
12	6.1	6.5	7.5	4.4	5.8	7.9	15	93	465	59	7.9	117
13	6.1	6.0	6.8	4.4	6.0	6.8	16	84	465	52	9.5	69
14	5.4	7.0	6.5	5.8	6.5	7.2	17	84	455	46	13	53
15	7.2	7.0	7.0	5.4	7.0	7.9	25	88	360	41	44	45
16	6.8	7.0	7.5	5.8	7.0	8.7	32	79	395	36	22	36
17	6.8	7.0	7.5	6.1	7.0	7.2	49	88	415	30	18	34
18	7.2	7.5	7.0	5.8	7.0	7.9	53	99	460	26	17	32
19	7.5	8.3	7.0	5.8	6.5	8.7	70	109	440	24	16	28
20	11	8.5	7.5	5.0	6.5	8.3	88	138	410	21	14	23
21	27	9.0	8.0	4.6	6.1	9.1	101	181	330	20	9.5	23
22	16	6.5	8.0	4.7	6.1	10	122	236	330	17	8.7	21
23	16	7.5	8.0	3.4	5.8	9.9	111	246	340	14	51	20
24	16	6.5	7.5	4.8	6.0	9.9	86	208	370	15	51	19
25	14	8.0	7.5	5.0	6.5	9.9	74	150	340	16	49	19
26	14	10	8.0	5.5	6.5	10	79	145	345	13	33	20
27	13	8.5	8.0	6.0	7.5	10	88	142	288	10	26	18
28	12	5.5	7.2	6.0	8.5	9.5	107	155	280	9.1	23	20
29	12	5.5	7.5	5.0	9.5	9.5	122	181	253	8.7	20	16
30	12	6.5	7.0	3.8	---	8.7	138	204	250	7.9	19	16
31	10	---	6.0	4.8	---	9.5	---	222	---	7.2	19	---
TOTAL	297.4	229.6	237.5	170.0	183.6	261.9	1527.6	4288	10346	1733.9	589.1	1327
MEAN	9.59	7.65	7.66	5.48	6.33	8.45	50.9	138	345	55.9	19.0	44.2
MAX	27	10	9.0	7.0	9.5	10	138	246	465	225	51	249
MIN	5.4	5.5	6.0	3.4	4.7	6.8	9.1	79	211	7.2	6.8	14
AC-FT	590	455	471	337	364	519	3030	8510	20520	3440	1170	2630

CAL YR 1979 TOTAL 32504.6 MEAN 89.1 MAX 568 MIN 5.0 AC-FT 64470
WTR YR 1980 TOTAL 21191.6 MEAN 57.9 MAX 465 MIN 3.4 AC-FT 42030

09349800 PIEDRA RIVER NEAR ARBOLES, CO

LOCATION.--Lat 37°05'18", long 107°23'50", in NE¼SW¼ sec.21, T.33 N., R.5 W., Archuleta County, Hydrologic Unit 14080102, on left bank 3 mi (5 km) downstream from Ignacio Creek, 5.2 mi (8.4 km) northeast of Arboles Post Office, and 8 mi (13 km) upstream from mouth.

DRAINAGE AREA.--629 mi² (1,629 km²).

PERIOD OF RECORD.--August 1962 to current year. Gage operated 1895-99 and 1910-27 at site 7.5 mi (12.1 km) downstream at altitude 6,000 ft (1,830 m). Low-flow records probably not equivalent.

GAGE.--Water-stage recorder. Datum of gage is 6,147.52 ft (1,873.764 m) Colorado State Highway Department bench mark.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,800 acres (11 km²) above station. Several observations of water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--18 years, 376 ft³/s (10.65 m³/s), 272,400 acre-ft/yr (336 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,370 ft³/s (237 m³/s) Sept. 6, 1970, gage height, 6.38 ft (1.945 m) recorded, 7.55 ft (2.301 m) from floodmarks, from rating curve extended above 4,400 ft³/s (125 m³/s), on basis of slope-area measurement of peak flow; minimum, 11 ft³/s (0.31 m³/s) Dec. 9, 1963, Oct. 1, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909, and Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s (42 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 22	unknown	*6,140	174	5.80	1.768
May 23	0430	3,300	93.5	4.48	1.366
Sept. 11	0500	2,040	57.8	3.67	1.119

Minimum daily discharge, 36 ft³/s (1.02 m³/s) Jan. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	70	50	50	60	177	162	2150	2150	1190	99	110
2	63	66	55	55	60	165	184	1970	2020	1020	106	101
3	59	65	60	46	60	153	180	1740	2020	892	113	94
4	59	66	60	46	65	150	231	1890	2190	804	155	88
5	59	66	60	50	65	142	322	2060	2400	712	115	84
6	57	65	60	50	63	139	504	2070	2580	628	106	86
7	59	66	60	55	66	136	656	2440	2430	576	99	108
8	57	68	55	55	70	120	612	2920	2350	564	113	122
9	57	70	55	55	63	116	704	2720	2770	510	122	132
10	57	70	55	44	61	123	864	2140	3020	455	110	640
11	55	65	55	36	65	131	856	1960	2980	420	99	1460
12	57	61	55	46	66	128	776	1770	2950	385	90	740
13	57	55	50	55	66	118	800	1410	2820	350	101	528
14	57	57	48	60	72	136	800	1330	2610	321	99	405
15	55	57	50	65	87	180	1200	1670	2390	285	192	326
16	59	57	55	65	100	204	1500	1710	2180	253	167	273
17	59	57	55	65	106	168	1600	1620	2060	221	125	233
18	61	59	50	65	113	177	1800	1770	2220	194	110	205
19	61	66	50	65	264	208	2100	1790	2250	177	106	188
20	63	65	50	60	212	208	2500	2040	2080	161	101	167
21	100	57	50	50	156	264	3100	2430	1920	149	94	152
22	126	57	50	50	139	304	4000	2870	1760	140	82	143
23	96	55	55	50	136	268	3000	2980	1770	135	98	135
24	91	70	55	50	136	264	2460	2900	1800	132	316	130
25	91	65	55	55	136	264	1820	2250	1780	138	285	125
26	89	66	55	60	136	204	2020	1960	1700	140	233	120
27	87	60	55	60	139	215	1970	1860	1640	132	188	115
28	83	48	55	60	165	190	2210	1850	1520	120	158	110
29	74	48	55	65	180	180	2290	2070	1350	113	135	108
30	76	50	55	65	---	184	2400	2110	1210	108	125	104
31	74	---	50	55	---	212	---	2160	---	104	118	---
TOTAL	2159	1847	1678	1708	3107	5628	43621	64610	64920	11529	4160	7332
MEAN	69.6	61.6	54.1	55.1	107	182	1454	2084	2164	372	134	244
MAX	126	70	60	65	264	304	4000	2980	3020	1190	316	1460
MIN	55	48	48	36	60	116	162	1330	1210	104	82	84
AC-FT	4280	3660	3330	3390	6160	11160	86520	128200	128800	22870	8250	14540

CAL YR 1979 TOTAL 299122 MEAN 820 MAX 4630 MIN 48 AC-FT 593300
WTR YR 1980 TOTAL 212299 MEAN 580 MAX 4000 MIN 36 AC-FT 421100

09352900 VALLECITO CREEK NEAR BAYFIELD, CO
(Hydrologic bench-mark station)

LOCATION.--Lat 37°28'39", long 107°32'35", in NE¼NW¼ sec.16, T.37 N., R.6 W., La Plata County, Hydrologic Unit 14080101, on right bank 60 ft (18 m) upstream from Fall Creek, 0.8 mi (1.3 km) downstream from Bear Creek, 6.7 mi (10.8 km) north of Vallecito Dam, and 18 mi (29 km) north of Bayfield.

DRAINAGE AREA.--72.1 mi^2 (186.7 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,906.80 ft (2,409.773 m), National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. No diversion above station.

AVERAGE DISCHARGE.--18 years, 141 ft^3/s (3.993 m^3/s), 102,200 acre-ft/yr (126 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft^3/s (200 m^3/s) Sept. 6, 1970, gage height, 5.51 ft (1.679 m) from water-stage recorder, 6.76 ft (2.060 m) from floodmarks, from rating curve extended above 1,400 ft^3/s (40 m^3/s), on basis of slope-area measurement of peak flow; minimum daily, 6.7 ft^3/s (0.19 m^3/s) Dec. 28, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred in October 1911 and June 1927.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft^3/s (28 m^3/s), and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
June 10	2330	*1,600	45.3	3.43	1.045	Sept. 10	unknown	1,460	41.3	3.30	1.006

Minimum daily discharge, 12 ft^3/s (0.34 m^3/s) Jan. 3, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	20	16	18	19	24	22	200	752	656	114	90
2	26	19	15	17	18	23	22	180	696	616	114	84
3	26	19	16	12	18	23	22	190	808	536	110	79
4	24	20	19	15	18	22	22	190	907	488	102	72
5	24	19	19	15	18	21	22	200	1030	431	100	69
6	24	19	18	14	18	21	24	220	1060	368	92	77
7	22	20	18	14	18	20	22	250	970	350	92	110
8	22	20	18	13	18	20	22	260	1020	380	96	96
9	22	19	18	14	19	20	21	220	1240	356	92	312
10	20	19	18	13	18	20	24	190	1230	326	86	1120
11	20	18	18	14	18	20	31	190	1210	296	80	420
12	20	18	18	16	19	20	28	188	1190	320	80	260
13	20	20	16	16	18	20	27	164	1110	302	86	200
14	22	19	16	16	18	20	28	157	1040	260	86	170
15	22	19	19	16	17	19	34	157	970	228	110	150
16	20	18	19	16	18	19	44	150	907	220	94	130
17	20	18	17	16	18	19	70	160	916	204	82	124
18	20	19	17	17	19	19	95	196	1030	204	74	112
19	22	18	16	15	19	19	110	220	970	188	68	104
20	26	17	17	12	18	18	140	332	864	180	63	98
21	30	18	18	13	19	18	180	544	808	168	60	92
22	26	18	18	15	19	18	200	744	816	147	57	86
23	26	19	17	16	19	17	170	800	840	150	346	79
24	26	18	18	18	19	18	140	728	824	153	544	76
25	26	19	19	19	19	18	120	496	816	150	386	71
26	24	19	18	20	20	19	130	445	872	168	250	68
27	22	18	17	19	20	19	150	459	832	188	184	65
28	22	1	19	18	22	20	190	512	744	137	147	63
29	22	20	18	14	24	20	210	640	664	127	124	61
30	22	18	20	19	---	20	230	704	664	120	110	57
31	20	---	19	19	---	20	---	752	---	117	100	---
TOTAL	714	559	549	489	545	614	2550	10838	27800	8534	4129	4595
MEAN	23.0	18.6	17.7	15.8	18.8	19.8	85.0	350	927	275	133	153
MAX	30	20	20	20	24	24	230	800	1240	656	544	1120
MIN	20	14	15	12	17	17	21	150	664	117	57	57
AC-FT	1420	1110	1090	970	1080	1220	5060	21500	55140	16930	8190	9110

CAL YR 1979 TOTAL 72019 MEAN 197 MAX 1150 MIN 12 AC-FT 142800
WTR YR 1980 TOTAL 61916 MEAN 169 MAX 1240 MIN 12 AC-FT 122800

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued
(Hydrologic Bench-Mark Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1963 to September 1968; October 1969 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1962 to current year.

INSTRUMENTATION.--Water-temperature recorder since November 1962.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 20.0ºC July 10, 1974; minimum, freezing point on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURES: Maximum, 17.0ºC several days during July and August; minimum, freezing point on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT										
30...	1330	22	80	8.3	3.0	9.9	K4	K9	K1	34
NOV										
28...	1130	14	101	7.5	.0	10.8	K1	< 1	< 1	46
JAN										
03...	0940	12	110	7.4	.0	10.8	20	< 1	< 1	45
FEB										
06...	0940	15	78	7.4	.0	10.8	< 1	< 1	< 1	37
MAR										
12...	1115	20	115	7.9	.0	10.8	< 1	< 1	< 1	47
APR										
09...	1045	20	81	7.3	.0	10.8	K2	< 1	< 1	36
MAY										
12...	1110	186	90	7.0	2.0	10.3	K19	< 1	K22	33
JUN										
03...	1115	747	50	7.5	4.0	9.7	< 1	< 1	< 1	25
30...	1000	569	40	6.8	8.5	8.7	K11	< 1	< 1	17
JUL										
28...	0940	144	40	6.4	8.5	8.6	K8	< 1	K6	18
AUG										
26...	0900	265	< 50	6.7	8.0	8.8	--	--	--	29

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT										
30...	14	10	2.3	1.7	.1	.6	20	23	1.8	.2
NOV										
28...	8	13	3.4	1.6	.1	.7	38	9.5	3.3	.2
JAN										
03...	14	12	3.7	3.0	.2	.7	31	18	.8	.2
FEB										
06...	8	11	2.4	1.7	.1	.6	29	8.6	1.4	.2
MAR										
12...	20	13	3.6	3.4	.2	.6	27	12	.7	.2
APR										
09...	11	11	2.1	1.2	.1	.6	25	11	1.3	.2
MAY										
12...	12	9.7	2.2	1.5	.1	.7	21	5.5	.1	.2
JUN										
03...	9	7.5	1.6	1.0	.1	.5	16	6.1	.3	.0
30...	0	5.0	1.1	.5	.1	.4	17	3.0	.5	.2
JUL										
28...	4	5.2	1.1	.7	.1	.5	14	6.5	.3	.4
AUG										
26...	19	7.6	2.4	3.0	.2	.8	21	6.8	.3	.2

K BASED ON NON-IDEAL COLONY COUNT.

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT 30...	4.1	68	56	.09	4.0	.07	.08	.010	.000
NOV 28...	4.0	157	59	.21	5.9	.25	.20	.040	.010
JAN 03...	4.1	61	62	.08	1.9	.20	.15	.010	.010
FEB 06...	4.2	89	49	.12	3.6	.34	.34	.010	.010
MAR 12...	4.1	43	62	.06	2.3	2.6	1.8	.000	.010
APR 09...	4.2	50	47	.07	2.7	.13	.13	.000	.000
MAY 12...	4.5	53	38	.07	26.6	--	.29	.030	.000
JUN 03...	3.0	39	30	.05	78.7	.00	--	.010	--
30...	2.3	20	24	.03	30.7	.45	.11	.060	.000
JUL 28...	2.6	32	26	.04	12.4	.00	.01	.020	.000
AUG 26...	2.7	47	29	.06	33.6	.03	.03	.010	.000

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)
JUN 03...	1115	1	0	0	20	<1	0	< 1	0	0	< 3

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
JUN 03...	0	<10	210	24	8	11	6	20	13	.1

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
JUN 03...	.0	< 10	0	0	0	0	18	< 6.0	40	12

BEST DOCUMENT AVAILABLE

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	GROSS ALPHA, DISSOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)
OCT											
03...	0850	.9	< .3	1.3	< .4	1.5	< 4.0	1.5	< .4	.06	.56

DATE	TIME	PCB, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLORDANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)	DIELDRIN TOTAL (UG/L)
OCT									
03...	0850	.00	.00	.00	.00	.00	.00	.00	.00

DATE	ENDOSULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALATHION, TOTAL (UG/L)	METHOXYCHLOR, TOTAL (UG/L)	METHYL PARATHION, TOTAL (UG/L)
OCT									
03...	.00	.00	.00	.00	.00	.00	.00	.00	.00

DATE	METHYL TRITHION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARATHION, TOTAL (UG/L)	PERTHANE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	TOTAL TRITHION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
OCT									
03...	.00	.00	.00	.00	0	.00	.00	.00	.00

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
OCT				
03...	0850	26	1	.07
30...	1330	22	1	.06
NOV				
28...	1130	14	1	.04
JAN				
03...	0940	12	1	.03
FEB				
06...	0940	15	4	.16
MAR				
12...	1115	20	3	.16
APR				
09...	1045	20	0	.00
MAY				
12...	1110	186	2	1.0
JUN				
03...	1115	747	8	16
30...	1000	569	3	4.6
JUL				
28...	0940	144	1	.39

BEST DOCUMENT AVAILABLE

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.0	7.0	---	---	.0	.0	.0	.0	.0	.0	.0	.0
2	9.0	7.0	---	---	.0	.0	.0	.0	.0	.0	.0	.0
3	---	---	---	---	.0	.0	.0	.0	.0	.0	.0	.0
4	---	---	---	---	.0	.0	.0	.0	.0	.0	.0	.0
5	---	---	---	---	.0	.0	.0	.0	.0	.0	.0	.0
6	---	---	---	---	.0	.0	.0	.0	.0	.0	.0	.0
7	---	---	1.0	1.0	.0	.0	.0	.0	.0	.0	.0	.0
8	---	---	1.0	---	.0	.0	.0	.0	.0	.0	.0	.0
9	---	---	---	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	---	---	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
11	---	---	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
12	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
13	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
14	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
15	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
16	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
17	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
18	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
19	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
20	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
21	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
22	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
23	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
24	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
25	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
26	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
27	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
28	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
29	---	---	.0	.0	.0	.0	.0	.0	.0	.0	---	---
30	3.0	3.0	.0	.0	.0	.0	.0	.0	---	---	---	---
31	3.0	1.0	---	---	.0	.0	.0	.0	---	---	---	---

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---			---	---	13.0	9.0	16.0	12.0	11.0	7.0
2	---	---			---	---	11.0	9.0	16.0	13.0	11.0	8.0
3	---	---			7.0	3.0	13.0	8.0	14.0	12.0	11.0	8.0
4	---	---			7.0	4.0	13.0	8.0	16.0	12.0	11.0	8.0
5	---	---			7.0	4.0	13.0	8.0	16.0	12.0	11.0	9.0
6	---	---			6.0	4.0	12.0	8.0	16.0	12.0	12.0	9.0
7	---	---			6.0	4.0	13.0	9.0	16.0	12.0	12.0	10.0
8	---	---			8.0	4.0	13.0	10.0	15.0	13.0	12.0	11.0
9	---	---			8.0	5.0	15.0	9.0	16.0	12.0	12.0	11.0
10	---	---			8.0	5.0	16.0	10.0	16.0	12.0	10.0	10.0
11	---	---			7.0	5.0	17.0	11.0	17.0	12.0	10.0	8.0
12	4.0	2.0			8.0	4.0	17.9	11.0	17.0	13.0	9.0	6.0
13	7.0	3.0			8.0	5.0	16.0	11.0	14.0	12.0	9.0	7.0
14	7.0	5.0			8.0	5.0	13.0	10.0	14.0	11.0	11.0	8.0
15	---	---			8.0	4.0	16.0	10.0	14.0	12.0	11.0	8.0
16	---	---			8.0	5.0	17.0	10.0	14.0	10.0	11.0	8.0
17	---	---			10.0	6.0	17.0	10.0	13.0	9.0	11.0	6.0
18	---	---			9.0	6.0	16.0	11.0	13.0	10.0	11.0	7.0
19	---	---			8.0	6.0	17.0	13.0	13.0	10.0	12.0	8.0
20	---	---			9.0	5.0	16.0	11.0	13.0	9.0	12.0	9.0
21	---	---			9.0	6.0	16.0	12.0	13.0	9.0	11.0	8.0
22	---	---			11.0	6.0	13.0	11.0	13.0	9.0	11.0	6.0
23	---	---			11.0	6.0	13.0	11.0	12.0	11.0	9.0	6.0
24	---	---			11.0	6.0	13.0	11.0	11.0	10.0	9.0	6.0
25	---	---			12.0	7.0	13.0	11.0	11.0	9.0	9.0	6.0
26	---	---			11.0	8.0	16.0	11.0	11.0	8.0	9.0	7.0
27	---	---			12.0	8.0	16.0	12.0	11.0	8.0	10.0	8.0
28	---	---			11.0	7.0	16.0	8.5	12.0	8.0	9.0	8.0
29	---	---			11.0	7.0	15.0	9.0	12.0	8.0	10.0	8.0
30	---	---			14.0	8.0	15.0	11.0	11.0	8.0	10.0	8.0
31	---	---			---	---	15.0	11.0	10.0	7.0	---	---

09353000 VALLECITO RESERVOIR NEAR BAYFIELD, CO

LOCATION.--Lat 37°23'00", long 107°34'30", in SW¼SW¼ sec.19, T.36 N., R.6 W., La Plata County, Hydrologic unit 14080101, in gatehouse above outlet gates at Vallecito Dam on Los Pinos (Pine) River, 300 ft (91 m) left of spillway, 0.4 mi (0.6 km) upstream from Jack Creek, and 11 mi (18 km) northeast of Bayfield.

PERIOD OF RECORD.--April 1941 to current year.

REVISED RECORDS.--WSP 959: 1941. WSP 1513: 1956.

GAGE.--Water-stage recorder. Datum of gage is 7,580 ft (2,310.4 m) National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service); gage readings have been reduced to elevations NGVD.

REMARKS.--Reservoir is formed by earth and rockfill dam; dam completed in March 1941. Capacity of reservoir, 126,300 acre-ft (156 hm³) between elevations 7,580 ft (2,310.4 m), sill of outlet gate, and 7,665 ft (2,336.3 m), top of spillway gates. Dead storage, 3,395 acre-ft (4.19 hm³). Figures given are usable contents. Reservoir is used to store water for irrigation in Los Pinos (Pine) River basin.

COOPERATION.--Records furnished by Pine River Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 128,200 acre-ft (158 hm³) July 27, 1957, elevation, 7,665.72 ft (2,336.511 m); minimum, 1,520 acre-ft (1.87 hm³) Oct. 24, 25, 1944, elevation, 7,584.10 ft (2,311.634 m). No usable storage prior to April 1941.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 121,820 acre-ft (150 hm³) July 2, elevation, 7,663.35 ft (2,335.789 m); minimum, 37,760 acre-ft (46.5 hm³) Oct. 25, elevation, 7,625.30 ft (2,324.191 m).

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	7,637.71	60,320	-
Oct. 31.	7,625.58	38,180	-22,140
Nov. 30.	7,626.57	39,780	+1,600
Dec. 31.	7,626.55	41,390	+1,610
CAL YR 1979			+6,410
Jan. 31.	7,629.00	43,850	+2,460
Feb. 29.	7,630.41	46,320	+2,470
Mar. 31.	7,631.94	49,090	+2,770
Apr. 30.	7,627.96	42,070	-7,020
May 31.	7,639.43	63,890	+21,820
June 30.	7,662.78	120,280	+56,390
July 31.	7,656.33	103,440	-16,840
Aug. 31.	7,646.15	78,720	-24,720
Sept. 30.	7,644.11	74,080	-4,640
WTR YR 1980			+13,760

09353500 LOS PINOS RIVER NEAR BAYFIELD, CO
(LOCALLY KNOWN AS PINE RIVER)

LOCATION.--Lat 37°22'58", long 107°34'37", in SW¼ sec.18, T.36 N., R.6 W., La Plata County, Hydrologic Unit 14080101, on left side of outlet flume from Vallecito Reservoir, 0.4 mi (0.6 km) upstream from Jack Creek, 2.0 mi (3.2 km) upstream from Red Creek, and 11 mi (18 km) north of Bayfield.

DRAINAGE AREA.--270 mi² (700 km²), approximately.

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder and concrete weir. Datum of gage is 7,582.54 ft (2,311.158 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service). See WSP 1713 or 1733 for history of changes prior to Aug. 13, 1956.

REMARKS.--Records good. Flow regulated by Vallecito Reservoir (station 09353000) since April 1941. Transmountain diversions above station by Weminuche Pass and Pine River-Weminuche Pass ditches (see elsewhere in this report).

COOPERATION.--Gage-height record is furnished by Pine River Irrigation District.

AVERAGE DISCHARGE.--13 years (water years 1928-40), 345 ft³/s (9.770 m³/s), 250,000 acre-ft/yr (308 hm³/yr), prior to completion of Vallecito Reservoir. 40 years (water years 1941-80), 354 ft³/s (10.03 m³/s), 256,500 acre-ft/yr (316 hm³/yr), subsequent to completion of Vallecito Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,800 ft³/s (391 m³/s) July 27, 1957, gage height, 12.2 ft (3.72 m), from floodmarks at supplementary gage, from rating curve extended above 2,500 ft³/s (71 m³/s), on basis of slope-area measurement of peak flow (result of automatic spillway gates releasing from Vallecito Reservoir); minimum daily, 3.2 ft³/s (0.091 m³/s) Feb. 11, 1951 (result of storage in Vallecito Reservoir); minimum daily prior to construction of Vallecito Reservoir, 38 ft³/s (1.08 m³/s) Dec. 21, 22, 1937.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,200 ft³/s (62.3 m³/s) at 0900 June 16, gage height, 4.27 ft (1.301 m); minimum daily, 40 ft³/s (1.13 m³/s) Nov. 12-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	726	44	44	45	45	45	49	944	775	1090	700	536
2	720	44	44	45	45	45	49	938	781	1430	705	546
3	720	44	44	45	45	45	74	932	786	1630	715	599
4	720	44	44	45	45	45	108	926	798	1620	715	594
5	720	42	44	45	45	45	108	926	1000	1610	715	599
6	715	42	44	45	45	47	108	926	1140	1610	715	599
7	710	42	44	45	45	49	108	926	1160	1610	710	594
8	705	42	44	45	45	49	108	926	1170	1280	705	594
9	700	44	44	45	45	49	108	785	1490	961	715	556
10	694	44	44	45	45	49	108	684	1870	794	720	480
11	694	42	44	45	45	49	108	684	2140	736	715	400
12	689	40	44	45	45	49	108	684	2160	736	715	400
13	684	40	44	45	45	49	108	684	2180	736	710	422
14	679	40	44	45	45	49	192	684	2190	694	705	422
15	585	40	45	45	45	49	323	684	2190	674	705	422
16	490	40	45	45	45	49	458	684	2130	720	705	422
17	460	40	45	45	45	49	619	684	1750	720	705	426
18	432	44	45	45	45	49	749	684	1840	715	689	426
19	414	44	45	45	45	49	855	694	2060	715	674	426
20	390	44	45	45	45	49	663	700	2040	710	669	426
21	309	44	45	45	45	49	270	705	2000	710	669	443
22	209	44	45	45	45	49	810	715	1980	739	669	456
23	176	44	45	45	45	49	980	726	1980	731	664	456
24	145	44	45	45	45	49	974	736	1990	708	664	456
25	83	44	45	45	45	49	968	748	1990	705	649	456
26	59	44	45	45	45	49	962	748	2000	679	623	456
27	45	44	45	45	45	49	956	753	2000	669	584	452
28	45	44	45	45	45	49	956	753	2000	669	551	447
29	45	44	45	45	45	49	950	758	1450	664	546	447
30	44	44	45	45	---	49	944	764	1090	659	546	447
31	44	---	45	45	---	49	---	770	---	669	541	---
TOTAL	13851	1286	1381	1395	1305	1497	13921	23955	50130	28393	20813	14405
MEAN	447	42.9	44.5	45.0	45.0	48.3	464	773	1671	916	671	480
MAX	726	44	45	45	45	49	980	944	2190	1630	720	599
MIN	44	40	44	45	45	45	49	684	775	659	541	400
AC-FT	27470	2550	2740	2770	2590	2970	27610	47510	99430	56320	41280	28570

CAL YR 1979 TOTAL 213800 MEAN 586 MAX 2240 MIN 31 AC-FT 424100
WTR YR 1980 TOTAL 172332 MEAN 471 MAX 2190 MIN 40 AC-FT 341800

09354500 LOS PINOS RIVER AT LA BOCA, CO

LOCATION.--Lat 37°00'34", long 107°35'56", in NE¼NW¼ sec.22, T.32 N., R.7 W., La Plata County, Hydrologic unit 14080101, on downstream end of right abutment of the Denver & Rio Grande Western Railroad Co. bridge, at southeast edge of La Boca, 0.1 mi (0.2 km) upstream from Spring Creek, and 13 mi (21 km) upstream from mouth.

DRAINAGE AREA.--510 mi² (1,320 km²), approximately.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733.

GAGE.--Water-stage recorder. Datum of gage is 6,143.58 ft (1,872.563 m), National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Vallecito Reservoir (station 09353000) 24 mi (39 km) upstream since April 1941. Diversions for irrigation of about 33,000 acres (130 km²) above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--30 years, 216 ft³/s (6.117 m³/s), 156,500 acre-ft/yr (193 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,400 ft³/s (181 m³/s) July 27, 1957, gage height, 8.95 ft (2.728 m), from rating curve extended above 5,100 ft³/s (140 m³/s); minimum daily, 6.1 ft³/s (0.17 m³/s) May 1, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred Oct. 5, 1911, at this location.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,320 ft³/s (65.7 m³/s) at 0530 Apr. 23, gage height, 6.69 ft (2.039 m); minimum daily, 50 ft³s (1.42 m³/s) Jan. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	375	73	88	60	80	188	170	1540	389	605	142	142
2	370	73	84	65	75	177	207	1440	379	769	165	134
3	367	74	79	55	80	174	203	1430	358	1100	176	128
4	361	71	78	55	80	164	357	1460	359	1120	186	139
5	364	72	75	60	80	161	494	1440	456	1110	176	151
6	359	72	72	65	85	157	694	1400	687	1110	173	159
7	366	75	71	65	95	157	685	1490	706	1120	179	164
8	363	81	71	65	98	127	488	1660	698	994	179	168
9	365	81	70	65	90	114	575	1530	851	581	186	298
10	363	70	69	55	89	127	706	1160	1310	355	187	361
11	358	64	67	50	92	156	782	1100	1550	239	169	451
12	351	65	65	60	93	137	569	1020	1630	204	174	187
13	359	66	65	75	94	110	521	893	1650	221	200	178
14	379	64	55	85	116	124	592	858	1670	223	208	171
15	374	64	55	100	182	205	941	966	1660	159	321	166
16	281	65	60	95	191	263	1180	959	1630	144	251	160
17	234	59	60	90	190	200	1350	893	1400	146	236	155
18	228	64	55	85	231	201	1540	902	1210	145	230	152
19	199	69	60	80	483	292	1730	885	1440	145	227	155
20	198	72	65	75	452	316	1800	848	1440	150	201	149
21	306	68	65	60	293	442	1250	840	1430	146	187	143
22	203	70	60	65	232	580	1810	825	1450	155	173	136
23	151	63	59	65	173	436	2030	773	1470	157	279	132
24	137	64	60	65	135	370	1840	739	1400	163	344	133
25	110	75	60	70	114	322	1540	667	1410	195	315	144
26	80	65	60	75	106	210	1540	631	1390	185	248	132
27	75	71	60	80	109	242	1550	569	1400	150	221	142
28	75	56	60	75	129	266	1550	497	1400	143	173	139
29	75	57	66	65	168	187	1620	474	1280	138	154	137
30	75	71	60	55	---	249	1630	434	886	148	149	130
31	76	---	55	70	---	281	---	403	---	134	150	---
TOTAL	7977	2054	2029	2150	4435	7135	31944	30726	34989	12354	6359	5136
MEAN	257	68.5	65.5	69.4	153	230	1065	991	1166	399	205	171
MAX	379	81	88	100	483	580	2030	1660	1670	1120	344	451
MIN	75	56	55	50	75	110	170	403	358	134	142	128
AC-FT	15820	4070	4020	4260	8800	14150	63360	60950	69400	24500	12610	10190

CAL YR 1979 TOTAL 206119 MEAN 565 MAX 2110 MIN 49 AC-FT 408800
WTR YR 1980 TOTAL 147288 MEAN 402 MAX 2030 MIN 50 AC-FT 292100

09355000 SPRING CREEK AT LA BOCA, CO

LOCATION.--Lat 37°00'40", long 107°35'47", in SE¼SW¼ sec.15, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on right bank in an excavated channel, 0.2 mi (0.3 km) upstream from mouth, and 0.2 mi (0.3 km) east of La Boca.

DRAINAGE AREA.--58 mi² (150 km²), approximately.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733.

GAGE.--Water-stage recorder. Altitude of gage is 6,160 ft (1,878 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Part of flow is return waste from irrigation. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--30 years, 30.3 ft³/s (0.858 m³/s), 21,950 acre-ft/yr (27.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,980 ft³/s (56.1 m³/s) Sept. 6, 1970, gage height, 4.62 ft (1.408 m), from rating curve extended above 160 ft³/s (4.53 m³/s), on basis of field estimate of peak flow; maximum gage height, 5.98 ft (1.823 m) Mar. 9, 1960 (backwater from ice); minimum daily discharge, 0.6 ft³/s (0.017 m³/s) Nov. 27, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 180 ft³/s (5.1 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Feb. 20	0630	*514	14.6	2.62	0.799	Sept. 10	2330	469	13.3	2.58	0.786

Minimum daily discharge, 3.0 ft³/s (0.085 m³/s) Dec. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	6.3	5.5	5.0	10	82	8.5	33	51	64	68	76
2	68	6.5	6.0	4.0	13	65	11	32	53	66	71	76
3	69	6.5	7.0	4.0	17	62	18	31	54	69	72	71
4	67	6.2	7.0	4.4	14	71	23	34	53	66	68	68
5	67	6.1	6.5	4.4	9.8	67	26	46	56	68	64	69
6	63	5.9	6.5	3.8	8.1	54	28	48	62	71	67	77
7	62	6.3	7.0	3.8	7.9	48	34	48	64	73	69	77
8	63	9.6	7.5	4.4	8.2	37	15	45	63	75	69	79
9	63	10	7.0	4.5	8.1	30	20	45	61	68	67	132
10	64	6.4	7.0	8.0	6.7	36	27	43	55	68	66	181
11	62	6.0	6.5	14	6.1	45	39	39	56	71	65	158
12	64	6.1	6.3	18	6.6	45	17	35	57	73	66	66
13	65	6.1	5.5	57	7.2	32	13	32	56	76	70	65
14	66	6.1	5.5	52	8.9	32	14	35	58	75	70	63
15	63	6.3	5.0	88	39	54	29	62	57	73	98	61
16	62	6.1	4.4	59	71	55	42	59	58	73	73	61
17	60	6.5	4.0	33	75	30	43	52	58	76	73	59
18	59	6.3	3.4	21	74	26	43	48	55	71	74	58
19	61	6.8	3.0	19	213	35	47	41	56	71	73	55
20	64	7.0	3.2	34	329	31	51	43	59	71	70	55
21	99	6.0	3.4	23	139	35	58	47	66	73	67	56
22	66	5.0	4.0	13	98	39	64	41	66	68	68	56
23	52	6.0	4.4	11	91	24	58	55	64	71	86	57
24	50	5.0	4.6	9.7	64	18	43	47	60	72	105	57
25	46	7.0	4.6	14	42	16	25	49	61	74	109	57
26	38	6.0	5.0	15	35	14	22	49	64	71	92	57
27	30	5.5	5.5	10	42	14	26	48	61	70	85	57
28	20	4.4	5.0	9.4	64	14	29	48	58	69	79	59
29	10	4.6	4.6	9.1	81	11	39	42	62	68	78	56
30	7.0	5.0	4.6	29	---	8.9	61	46	63	70	76	54
31	6.3	---	4.6	15	---	10	---	46	---	68	76	---
TOTAL	1704.3	187.6	164.1	599.5	1588.6	1140.9	973.5	1369	1767	2192	2334	2173
MEAN	55.0	6.25	5.29	19.3	54.8	36.8	32.5	44.2	58.9	70.7	75.3	72.4
MAX	99	10	7.5	88	329	82	64	62	66	76	109	181
MIN	6.3	4.4	3.0	3.8	6.1	8.9	8.5	31	51	64	64	54
AC-FT	3380	372	325	1190	3150	2260	1930	2720	3500	4350	4630	4310

CAL YR 1979 TOTAL 15967.0 MEAN 43.7 MAX 263 MIN 3.0 AC-FT 31670
WTR YR 1980 TOTAL 16193.5 MEAN 44.2 MAX 329 MIN 3.0 AC-FT 32120

09357500 ANIMAS RIVER AT HOWARDSVILLE, CO

LOCATION.--Lat 37°49'59", long 107°35'56", San Juan County, Hydrologic Unit 14080104, on right bank 1,000 ft (300 m) downstream from bridge on State Highway 110, 0.4 mi (0.6 km) southwest of Howardsville, and 0.4 mi (0.6 km) downstream from Cunningham Creek.

DRAINAGE AREA.--55.9 mi² (145 km²).

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 9,616.98 ft (2,931.256 m), National Geodetic Vertical Datum of 1929. Prior to Aug. 18, 1939, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good. No diversion above station.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--45 years, 102 ft³/s (2.889 m³/s), 73,900 acre-ft/yr (91.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,980 ft³/s (56.1 m³/s) June 18, 1949, gage height, 4.36 ft (1.329 m), from rating curve extended above 950 ft³/s (27 m³/s); maximum gage height, 5.24 ft (1.597 m) Feb. 18, 1958 (backwater from snowslide); minimum daily discharge, 9.0 ft³/s (0.25 m³/s) Jan. 10, 1957, Feb. 15, Mar. 9, 1964, Feb. 13, 1965.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,230 ft³/s (34.8 m³/s) at 2000 June 10, gage height, 3.76 ft (1.146 m), only peak above base of 700 ft³/s (20 m³/s); minimum daily, 12 ft³/s (0.34 m³/s) Mar. 8-13.

CORRECTIONS.--The maximum gage height for water year 1979 was inadvertently omitted from the report for 1979, it was, 6.38 ft (1.945 m) Jan. 18 (backwater from ice).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	20	17	15	15	13	13	101	401	455	82	46
2	27	20	17	14	15	13	13	91	374	428	80	43
3	26	20	17	14	14	13	13	106	432	401	77	42
4	25	20	17	14	14	13	13	140	510	370	73	39
5	25	20	17	14	14	13	13	147	595	337	69	38
6	25	20	17	14	14	13	13	154	622	304	64	40
7	25	20	17	14	14	13	13	182	560	294	61	43
8	24	20	17	15	14	12	13	179	616	314	62	39
9	24	20	17	14	14	12	13	168	804	304	62	54
10	23	20	17	15	14	12	13	140	853	286	62	61
11	23	19	16	16	14	12	13	121	923	283	56	65
12	23	19	16	16	14	12	13	101	846	294	55	58
13	22	19	16	16	14	12	13	89	790	262	55	52
14	22	18	16	15	14	13	13	89	714	230	55	49
15	22	18	16	15	14	14	15	86	644	217	62	46
16	22	18	16	15	14	14	16	80	616	202	55	44
17	22	18	16	14	14	14	18	84	638	190	50	42
18	23	18	16	15	14	14	22	82	714	179	50	39
19	23	18	16	15	15	14	29	95	684	170	47	38
20	25	18	16	15	14	14	38	157	627	157	45	37
21	26	18	16	15	13	13	50	262	595	142	43	36
22	22	18	16	14	13	14	59	383	595	130	42	35
23	22	18	15	15	13	14	65	450	649	123	77	34
24	23	18	15	15	13	13	50	392	654	123	101	32
25	23	18	15	15	13	13	42	276	666	126	97	32
26	23	18	15	15	13	13	42	244	690	119	79	31
27	22	18	15	15	14	13	45	258	649	110	69	31
28	22	17	15	15	14	13	61	297	540	101	61	30
29	22	17	15	15	14	13	89	329	460	91	55	30
30	20	17	15	15	---	13	110	388	480	89	54	28
31	20	---	15	15	---	13	---	401	---	86	50	---
TOTAL	724	560	497	459	403	405	933	6072	18941	6917	1950	1234
MEAN	23.4	18.7	16.0	14.8	13.9	13.1	31.1	196	631	223	62.9	41.1
MAX	28	20	17	16	15	14	110	450	923	455	101	65
MIN	20	17	15	14	13	12	13	80	374	86	42	28
AC-FT	1440	1110	986	910	799	803	1850	12040	37570	13720	3870	2450

CAL YR 1979 TOTAL 42504 MEAN 116 MAX 856 MIN 10 AC-FT 84310
WTR YR 1980 TOTAL 39095 MEAN 107 MAX 923 MIN 12 AC-FT 77540

09361000 HERMOSA CREEK NEAR HERMOSA, CO

LOCATION.--Lat 37°25'19", long 107°50'40", in NE¼NW¼ sec.3, T.36 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on right bank 20 ft (6 m) downstream from private bridge, 0.8 mi (1.3 km) northwest of Hermosa, and 2.2 mi (3.5 km) upstream from mouth.

DRAINAGE AREA.--172 mi² (445 km²).

PERIOD OF RECORD.--November and December 1911 (gage heights and discharge measurements only), January 1912 to September 1914, October 1919 to September 1928, October 1939 to September 1980 (discontinued). Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1927(M).

GAGE.--Water-stage recorder. Datum of gage is 6,705.88 ft (2,043.952 m), National Geodetic Vertical Datum of 1929. Prior to September 1914, nonrecording gage, and April 1920 to September 1928, water-stage recorder (nonrecording gage for short periods), within 0.5 mi (0.8 km) at different datums.

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are poor. Diversions for irrigation of a few hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--52 years (water years 1913-14, 1920-28, 1940-80), 137 ft³/s (3.880 m³/s), 99,260 acre-ft/yr (122 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,980 ft³/s (84.4 m³/s) May 12, 1941, gage height, 6.02 ft (1.835 m); maximum gage height, 8.50 ft (2.591 m) Sept. 12, 1927, from floodmarks, site and datum then in use; minimum daily discharge, 4.0 ft³/s (0.11 m³/s) Dec. 9, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft³/s (23 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
Apr. 22	0100	812	23.0	3.04	0.927	May 21	2200	*1,720	48.7	4.30	1.311
May 8	0100	1,020	28.9	3.35	1.021						

Minimum daily discharge, 15 ft³/s (0.42 m³/s) Nov. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	16	17	17	17	26	32	525	1140	353	51	33
2	22	19	17	18	17	26	32	439	1070	333	52	32
3	22	20	18	17	18	27	30	452	1100	291	51	31
4	22	20	19	17	18	26	29	550	1220	250	48	30
5	21	20	19	17	17	23	33	664	1330	221	47	30
6	21	20	20	17	17	23	40	734	1370	198	46	32
7	21	22	20	17	18	23	48	854	1260	186	44	36
8	20	22	19	17	18	22	50	934	1250	188	44	35
9	20	22	19	17	17	22	72	860	1380	168	45	59
10	20	21	18	18	17	22	100	710	1440	154	43	138
11	20	20	19	18	17	23	138	669	1400	142	41	130
12	20	19	18	18	17	24	111	615	1260	136	40	80
13	20	20	18	18	17	23	95	510	1160	134	49	63
14	20	20	18	18	18	23	117	475	1050	130	45	53
15	20	19	17	18	19	25	182	480	914	115	48	48
16	20	18	17	17	19	27	244	490	812	103	43	43
17	20	18	18	17	19	26	305	620	788	96	40	41
18	20	19	18	17	19	26	390	722	836	89	38	38
19	20	20	18	18	19	30	480	788	836	83	37	36
20	21	19	18	18	20	29	570	1020	752	79	35	35
21	27	17	19	17	20	31	620	1310	674	76	34	34
22	22	17	19	16	20	37	716	1560	647	73	33	33
23	20	17	18	16	20	37	630	1560	610	75	42	32
24	20	17	17	16	19	37	505	1400	580	72	56	32
25	20	18	17	17	20	40	403	1050	535	76	63	31
26	20	19	18	18	20	38	434	920	510	79	48	30
27	19	19	19	18	21	35	495	872	475	79	42	30
28	19	15	19	17	22	34	525	962	421	59	38	30
29	19	16	18	19	26	31	605	1100	369	57	36	30
30	19	17	17	19	---	30	590	1140	357	64	35	28
31	16	---	17	17	---	31	---	1160	---	55	35	---
TOTAL	633	566	563	539	546	877	8621	26145	27546	4214	1349	1333
MEAN	20.4	18.9	18.2	17.4	18.8	28.3	287	843	918	136	43.5	44.4
MAX	27	22	20	19	26	40	716	1560	1440	353	63	138
MIN	16	15	17	16	17	22	29	439	357	55	33	28
AC-FT	1260	1120	1120	1070	1080	1740	17100	51860	54640	8360	2680	2640

CAL YR 1979 TOTAL 86009 MEAN 236 MAX 1880 MIN 15 AC-FT 170600
WTR YR 1980 TOTAL 72932 MEAN 199 MAX 1560 MIN 15 AC-FT 144700

NOTE.--NO GAGE-HEIGHT RECORD JAN. 1 TO FEB. 25.

09361500 ANIMAS RIVER AT DURANGO, CO

LOCATION.--Lat 37°16'45", long 107°52'47", in SW¼SW¼ sec.20, T.35 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on left bank at Western Colorado Power Co.'s plant at Durango, 0.8 mi (1.3 km) upstream from Lightner Creek.

DRAINAGE AREA.--692 mi² (1,792 km²).

PERIOD OF RECORD.--June to December 1895, April 1896 to December 1898, April 1899 to December 1900, March to May 1901, April to November 1902, March to April 1903 (gage heights only, erroneously stated as discredited in WSP 1563), May to October 1903, July 1904 to December 1905, January to December 1910 (gage heights only), January to September 1911, January 1912 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 764: Drainage area. WSP 929: 1927(M). WSP 1243: 1911, 1918(M). WSP 1563: 1911-25 (monthly figures only).

GAGE.--Water-stage recorder. Datum of gage is 6,501.57 ft (1,981.679 m), National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 2, 1921.

REMARKS.--Records good. Diversions for irrigation of about 4,000 acres (16 km²) above station. Natural regulation by many lakes and regulation for power above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--75 years (water years 1897-1900, 1905, 1911-80), 838 ft³/s (23.73 m³/s), 607,100 acre-ft/yr (749 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s (708 m³/s) Oct. 5, 1911, gage height, 11 ft (3.4 m), present site and datum, from rating curve extended above 13,000 ft³/s (370 m³/s); minimum daily, 94 ft³/s (2.66 m³/s) Mar. 2, 1913.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, that of Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft³/s (110 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 24	0730	5,160	146	6.06	1.847	June 11	1100	*8,220	233	7.45	2.271

Minimum daily discharge, 167 ft³/s (4.73 m³/s) Jan. 21-24, Feb. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	224	212	178	175	169	215	270	1800	4150	3240	554	374
2	215	227	185	188	171	218	280	1580	3830	2910	530	350
3	215	234	190	178	175	218	275	1510	4030	2710	530	332
4	209	215	200	178	178	221	280	1750	4620	2540	506	310
5	212	215	203	182	175	221	295	2050	5280	2280	474	285
6	209	215	198	178	173	221	320	2220	5830	2040	436	290
7	209	218	195	175	178	221	350	2460	5530	1810	415	326
8	209	230	198	178	180	218	368	2720	5200	1940	408	338
9	212	230	195	178	173	215	368	2600	6160	1840	429	368
10	218	221	192	188	167	221	415	2230	7150	1700	401	860
11	203	206	190	182	167	224	466	2010	7550	1500	380	1570
12	206	200	192	180	171	242	450	1870	7180	1560	362	1030
13	200	212	190	182	175	242	422	1570	6710	1520	362	790
14	200	212	180	185	188	238	429	1450	6300	1420	380	646
15	200	200	180	188	188	250	554	1510	5530	1240	401	578
16	200	195	180	178	188	262	691	1460	5000	1160	422	514
17	198	192	190	175	185	262	840	1610	4720	1080	380	466
18	198	192	185	178	190	262	1020	1870	5200	1020	350	422
19	198	195	182	182	198	266	1270	1950	5500	960	326	387
20	209	195	185	180	203	262	1610	2430	5060	930	310	368
21	242	188	190	167	203	262	1840	3270	4580	850	295	350
22	246	182	190	167	209	275	2180	4370	4400	780	285	338
23	234	182	180	167	192	285	2150	4860	4480	770	320	326
24	230	188	178	167	192	270	1780	4840	4560	750	628	320
25	230	190	180	171	192	270	1450	3540	4330	770	960	295
26	224	200	192	180	190	266	1400	3000	4390	820	780	285
27	224	209	198	182	195	270	1500	2890	4220	750	619	280
28	221	198	190	178	203	275	1610	3100	3920	691	522	280
29	221	190	182	212	212	270	1880	3620	3270	637	466	266
30	224	180	175	188	---	266	1950	3860	3050	628	436	262
31	221	---	173	171	---	266	---	4120	---	594	401	---
TOTAL	6661	6123	5816	5558	5380	7674	28713	80120	151730	43440	14068	13606
MEAN	215	204	188	179	186	248	957	2585	5058	1401	454	454
MAX	246	234	203	212	212	285	2180	4860	7550	3240	960	1570
MIN	198	180	173	167	167	215	270	1450	3050	594	285	262
AC-FT	13210	12140	11540	11020	10670	15220	56950	158900	301000	86160	27900	26990

CAL YR 1979 TOTAL 422671 MEAN 1158 MAX 7480 MIN 173 AC-FT 838400
WTR YR 1980 TOTAL 368889 MEAN 1008 MAX 7550 MIN 167 AC-FT 731700

09363050 FLORIDA RIVER BELOW FLORIDA FARMERS DITCH, NEAR DURANGO, CO

LOCATION.--Lat 37°17'42", long 107°47'28", in SW¼SW¼ sec.18, T.35 N., R.8 W., La Plata County, Hydrologic Unit 14080104, on right bank 30 ft (9 m) downstream from diversion dam for Florida Farmers ditch and 4.0 mi (6.4 km) east of Riverview School in Durango.

DRAINAGE AREA.--108 mi² (280 km²).

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,065.35 ft (2,153.519 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Lemon Reservoir, capacity, 40,100 acre-ft (49.4 hm³). Diversions above station for irrigation above and below station and for municipal supply of Durango. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--13 years, 41.3 ft³/s (1.170 m³/s), 29,920 acre-ft/yr (36.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,100 ft³/s (31.2 m³/s) May 19, 1973, gage height, 5.70 ft (1.737 m); minimum daily, 0.70 ft³/s (0.020 m³/s) Oct. 14, 1968, Oct. 17, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 760 ft³/s (21.5 m³/s) at 1000 June 13, gage height, 5.15 ft (1.570 m); minimum daily, 2.4 ft³/s (0.068 m³/s) Oct. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	8.7	10	5.5	7.0	19	16	459	192	53	12	8.3
2	4.6	8.7	8.0	6.0	7.0	20	19	438	172	38	12	8.3
3	5.2	8.3	7.0	5.5	7.5	20	16	453	130	30	12	8.3
4	4.8	8.3	6.0	6.0	7.5	18	20	486	102	24	12	8.3
5	4.3	7.9	6.0	5.5	7.0	17	24	501	95	24	11	7.9
6	4.3	7.2	6.5	6.5	7.5	16	34	465	231	21	12	7.9
7	3.9	7.2	6.8	7.0	8.5	17	40	465	365	23	11	7.5
8	3.7	7.9	8.3	6.5	7.5	15	43	520	358	25	12	7.2
9	3.5	7.9	6.2	7.0	7.0	14	51	462	340	16	10	7.0
10	3.5	7.2	5.2	7.0	6.5	16	70	393	432	18	9.5	10
11	3.5	7.2	5.8	7.0	6.0	18	81	390	622	15	9.5	7.9
12	3.5	7.2	6.0	7.0	6.0	17	67	365	685	16	8.3	6.8
13	3.2	7.0	4.8	7.5	7.0	17	64	325	685	16	7.0	7.0
14	3.2	7.5	5.2	8.0	9.0	18	86	322	608	16	9.5	6.5
15	3.2	7.9	5.0	9.0	11	22	114	332	378	16	9.1	6.5
16	3.2	7.9	5.5	8.7	12	24	132	328	312	15	9.1	6.5
17	3.2	7.9	6.0	8.7	13	22	172	328	254	14	9.1	6.2
18	2.8	8.7	5.5	9.1	13	22	246	330	252	13	9.1	6.2
19	2.4	7.9	5.5	8.7	16	18	322	332	348	12	9.1	6.2
20	8.6	8.3	6.0	8.0	16	17	360	338	542	8.7	8.7	6.5
21	16	6.5	6.2	7.5	13	20	444	348	573	8.7	9.5	6.8
22	12	7.5	6.2	7.0	11	24	510	362	183	9.1	9.5	6.8
23	11	8.3	5.5	6.5	18	24	501	348	258	9.1	9.5	6.8
24	9.9	6.8	5.8	6.5	15	22	432	332	477	13	9.1	7.9
25	9.5	9.5	7.0	6.5	13	20	420	312	375	16	8.7	6.0
26	9.1	8.3	7.2	7.0	12	21	441	295	222	6.7	8.7	6.0
27	8.7	5.8	7.5	7.0	13	19	456	262	166	9.9	9.1	6.0
28	8.7	27	5.8	7.0	14	18	483	234	216	6.5	8.3	5.8
29	8.7	13	6.5	6.5	15	16	489	224	256	5.8	8.7	5.5
30	8.7	12	6.0	8.0	---	16	486	208	171	5.5	8.7	5.5
31	8.7	---	5.5	7.0	---	17	---	206	---	7.1	8.3	---
TOTAL	188.8	261.5	194.5	220.7	306.0	584	6639	11163	10000	511.1	300.1	210.1
MEAN	6.09	8.72	6.27	7.12	10.6	18.8	221	360	333	16.5	9.68	7.00
MAX	16	27	10	9.1	18	24	510	520	685	53	12	10
MIN	2.4	5.8	4.8	5.5	6.0	14	16	206	95	5.5	7.0	5.5
AC-FT	374	519	386	438	607	1160	13170	22140	19830	1010	595	417

CAL YR 1979 TOTAL 38901.3 MEAN 107 MAX 800 MIN 1.0 AC-FT 77160
WTR YR 1980 TOTAL 30578.8 MEAN 83.5 MAX 685 MIN 2.4 AC-FT 60650

09363100 SALT CREEK NEAR OXFORD, CO

LOCATION.--Lat 37°08'23", long 107°45'10", in NE¼NE¼ sec.6, T.33 N., R.8 W., La Plata County, Hydrologic Unit 14080104, on right bank 2.9 mi (4.7 km) upstream from mouth, 3.0 mi (4.8 km) southwest of Oxford, and 11 mi (18 km) southeast of Durango.

DRAINAGE AREA.--16.7 mi² (43.3 km²).

PERIOD OF RECORD.--October 1956 to September 1963, October 1967 to current year.

REVISED RECORDS.--WSP 1925: 1960.

GAGE.--Water-stage recorder. Altitude of gage is 6,470 ft (1,972 m), from topographic map. Prior to October 1967, at site 0.2 mi (0.3 km) upstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Most of flow is return flow from areas irrigated by water imported from Los Pinos River. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years, 12.2 ft³/s (0.346 m³/s), 8,840 acre-ft/yr (10.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 811 ft³/s (23.0 m³/s) Oct. 19, 1972, gage height, 5.24 ft (1.597 m), from rating curve extended above 200 ft³/s (5.7 m³/s), on basis of slope-area measurements at gage heights 3.54 and 5.24 ft (1.079 and 1.597 m); no flow at times in 1959-60, 1962, 1977, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 291 ft³/s (8.24 m³/s) at 2000 Apr. 6, gage height, 4.07 ft (1.241 m); minimum daily, 0.40 ft³/s (0.011 m³/s) Feb. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	3.4	.88	.70	1.4	26	15	2.5	22	20	17	26
2	19	3.0	.79	.60	1.4	24	16	2.4	22	20	17	25
3	19	3.0	.65	.60	1.3	20	36	2.3	18	20	17	22
4	18	2.3	.70	.60	1.3	17	62	1.9	16	20	16	23
5	20	1.2	.88	.65	1.3	22	102	2.0	16	16	15	25
6	21	1.1	.97	.50	1.3	23	154	2.0	16	17	17	26
7	22	1.2	.88	.55	1.2	22	98	3.0	17	17	17	26
8	21	1.8	.97	.65	1.2	16	39	2.5	18	20	16	25
9	22	2.7	1.0	.60	1.3	12	61	2.4	18	16	17	51
10	25	2.2	.96	.79	1.4	14	71	1.9	18	18	17	71
11	25	1.7	.96	.79	.97	19	51	2.3	17	22	17	84
12	26	1.6	1.0	.70	.60	15	21	2.6	14	20	16	29
13	27	1.5	.90	.88	.50	10	14	7.6	16	21	15	29
14	22	1.9	.79	1.1	.40	14	13	1.9	17	22	15	29
15	22	1.7	.88	4.4	.79	33	9.4	2.8	17	18	25	30
16	22	1.2	.70	6.9	3.3	51	5.7	3.4	15	16	19	28
17	21	1.2	.55	6.1	5.1	37	3.9	2.0	15	18	18	26
18	22	1.3	.55	2.5	13	46	3.4	1.7	12	20	17	25
19	22	1.5	.45	3.1	57	73	3.0	1.6	11	23	18	25
20	24	1.4	.45	3.1	68	98	3.0	1.7	14	21	17	25
21	41	1.3	.50	4.6	37	144	3.0	1.9	16	21	17	24
22	25	1.2	.60	3.5	20	132	3.5	1.8	17	23	18	23
23	19	1.2	.65	2.5	20	96	3.0	14	13	25	31	25
24	18	1.4	.65	1.8	14	78	3.2	16	14	27	52	25
25	16	1.7	.65	1.5	13	55	3.0	9.2	16	25	50	26
26	8.9	1.5	.65	1.3	10	23	2.7	5.7	17	23	41	26
27	7.2	1.4	.79	1.1	9.2	45	2.5	4.4	15	22	31	25
28	4.2	1.2	.70	.97	9.8	40	2.4	4.4	17	20	28	25
29	4.0	1.2	.70	1.3	17	23	2.4	6.1	22	18	23	24
30	3.9	.97	.65	1.4	---	43	2.6	8.6	22	20	26	25
31	3.9	---	.65	1.3	---	40	---	18	---	19	27	---
TOTAL	590.1	49.97	23.10	57.08	312.76	1311	809.7	140.6	498	628	687	898
MEAN	19.0	1.67	.75	1.84	10.8	42.3	27.0	4.54	16.6	20.3	22.2	29.9
MAX	41	3.4	1.0	6.9	68	144	154	18	22	27	52	84
MIN	3.9	.97	.45	.50	.40	10	2.4	1.6	11	16	15	22
AC-FT	1170	99	46	113	620	2600	1610	279	988	1250	1360	1780

CAL YR 1979 TOTAL 6302.82 MEAN 17.3 MAX 171 MIN .45 AC-FT 12500
WTR YR 1980 TOTAL 6005.31 MEAN 16.4 MAX 154 MIN .40 AC-FT 11910

09363200 FLORIDA RIVER AT BONDAD, CO

LOCATION.--Lat 37°03'24", long 107°52'09", in NE¼SW¼ sec.31, T.33 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on left bank 40 ft (12 m) downstream from BIA bridge, 0.6 mi (1.0 km) upstream from mouth, 0.7 mi (1.1 km) northeast of Bondad, and 15 mi (24 km) south of Durango.

DRAINAGE AREA.--221 mi² (572 km²).

PERIOD OF RECORD.--October 1956 to September 1963, October 1967 to current year.

REVISED RECORDS.--WSP 1713: 1958.

GAGE.--Water-stage recorder. Altitude of gage is 6,000 ft (1,829 m), from topographic map. Prior to Sept. 11, 1958, at site 300 ft (91 m) upstream at datum 2.39 ft (0.728 m) higher.

REMARKS.--Records good except those for winter period, which are poor. Diversion for irrigation of about 20,000 acres (81 km²) above station. Flow regulated by Lemon Reservoir, capacity, 40,100 acre-ft (49.4 hm³) since November 1963. Most of flow is return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--7 years (water years 1957-63), 78.0 ft³/s (2.203 m³/s), 56,370 acre-ft/yr (69.5 hm³/yr), prior to completion of Lemon Dam; 13 years (water years 1968-80), 75.7 ft/s (2.144 m³/s), 54,840 acre-ftyr (67.6 hm³/yr), subsequent to completion of Lemon Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,640 ft³/s (46.4 m³/s) Oct. 19, 1972, gage height, 6.30 ft (1.920 m), from rating curve extended above 1,100 ft³/s (31 m³/s), on basis of slope-area measurement of peak flow; minimum daily, 4.6 ft³/s (0.13 m³/s) July 24, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 744 ft³/s (21.1 m³/s) at 0930 June 12, gage height, 5.54 ft (1.689 m); minimum daily, 24 ft³/s (0.68 m³/s) Jan. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	36	30	27	33	98	92	494	232	121	63	67
2	56	35	34	30	33	95	116	470	212	104	66	66
3	60	35	38	27	35	95	113	474	187	84	65	63
4	59	35	34	30	36	87	168	510	134	82	62	63
5	63	35	34	24	35	82	241	542	120	75	56	62
6	58	35	31	33	34	88	372	550	140	68	58	67
7	59	35	31	34	38	87	354	502	356	67	58	68
8	60	39	33	30	37	71	229	530	363	76	58	71
9	59	39	31	33	34	66	268	518	346	70	60	111
10	63	35	31	35	31	68	343	438	363	63	62	182
11	66	33	31	35	30	84	357	418	570	71	62	210
12	71	32	32	34	30	78	205	394	732	65	58	98
13	72	32	29	36	32	63	191	360	726	70	59	82
14	72	32	26	40	41	72	201	335	726	72	62	80
15	71	32	25	50	55	112	238	366	462	62	76	78
16	67	33	26	49	56	143	270	370	390	55	72	74
17	66	33	30	42	60	112	262	349	290	56	68	66
18	68	37	27	43	72	116	311	360	272	55	66	63
19	68	39	26	43	163	163	402	363	294	56	63	63
20	67	39	31	41	185	179	450	370	494	55	56	63
21	95	35	32	35	134	235	522	378	600	52	56	65
22	76	32	32	33	105	262	610	398	389	52	59	63
23	61	34	26	32	87	223	615	418	179	56	81	63
24	58	47	30	30	72	199	542	398	490	58	114	65
25	56	46	31	30	65	179	470	356	478	82	123	66
26	51	39	34	34	60	112	482	332	305	76	100	68
27	47	37	35	35	63	127	498	305	225	71	88	66
28	39	31	32	35	70	155	510	265	228	70	78	66
29	36	30	31	30	81	100	542	265	293	65	67	66
30	36	32	29	41	---	132	538	242	307	63	67	65
31	36	---	28	32	---	159	---	235	---	63	68	---
TOTAL	1875	1064	950	1083	1807	3842	10512	12305	10903	2135	2151	2350
MEAN	60.5	35.5	30.6	34.9	62.3	124	350	397	363	68.9	69.4	78.3
MAX	95	47	38	50	185	262	615	550	732	121	123	210
MIN	36	30	25	24	30	63	92	235	120	52	56	62
AC-FT	3720	2110	1880	2150	3580	7620	20850	24410	21630	4230	4270	4660

CAL YR 1979 TOTAL 61795 MEAN 169 MAX 855 MIN 25 AC-FT 122600
WTR YR 1980 TOTAL 50977 MEAN 139 MAX 732 MIN 24 AC-FT 101100

09363500 ANIMAS RIVER NEAR CEDAR HILL, NM

LOCATION.--Lat 37°02'17", long 107°52'25", in sec.7, T.32 N., R.9 W., La Plata County, CO, Hydrologic Unit 14080104, on right bank 0.8 mi (1.3 km) downstream from Florida River, 2.5 mi (4.0 km) upstream from Colorado-New Mexico State line, 8.5 mi (13.7 km) north of Cedar Hill, and at mile 32.9 (km 52.9).

DRAINAGE AREA.--1,090 mi² (2,820 km²), approximately.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for October and November 1933, published in WSP 1313.

REVISED RECORDS.--WSP 1563: 1940 and 1946 (monthly figures only).

GAGE.--Water-stage recorder. Altitude of gage is 5,960 ft (1,817 m), from topographic map. Prior to Sept. 14, 1937, at datum between 1.52 and 1.36 ft (0.46 and 0.41 m) higher. Sept. 15, 1937, to Sept. 30, 1946, at datum 1.36 ft (0.41 m) higher.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 20,000 acres (81 km²) above station. During water years 1944-49, Twin Rocks Canal diverted above station for irrigation below. Slight regulation by Lemon Dam, capacity, 40,100 acre-ft (49.4 hm³), about 30 mi (50 km) upstream on Florida River since November 1963.

AVERAGE DISCHARGE.--47 years, 898 ft³/s (25.43 m³/s), 650,600 acre-ft/yr (802 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,100 ft³/s (371 m³/s) June 19, 1949, gage height, 11.45 ft (3.490 m); minimum, 63 ft³/s (1.78 m³/s) Jan. 21, 1935.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood in October 1911 exceeded all other known floods at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft³/s (110 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
May 24	1030	5,980	169	8.51	2.594	June 12	1230	*8,200	232	9.73	2.966

Minimum daily discharge, 182 ft³/s (5.15 m³/s) Jan. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	272	266	285	200	209	436	480	2640	4760	3300	681	492
2	271	272	290	190	202	426	528	2360	4480	3100	657	459
3	266	285	290	200	206	428	522	2260	4500	2900	600	426
4	247	281	282	195	209	425	600	2470	4950	2700	570	413
5	248	275	277	190	216	407	739	2770	5390	2400	539	388
6	244	278	266	195	209	406	1030	2980	5860	2200	511	373
7	246	281	264	195	250	416	1060	3130	5840	2000	489	384
8	246	304	263	195	257	378	853	3440	5540	1900	479	423
9	244	302	261	195	247	373	969	3320	6150	1900	500	489
10	258	289	256	220	230	386	1160	2860	6930	1710	497	889
11	250	277	252	216	223	419	1230	2580	7570	1530	472	1630
12	250	272	252	209	234	415	963	2390	7820	1530	444	1140
13	245	276	251	212	234	396	927	2110	7480	1540	431	857
14	245	282	242	234	274	419	1010	1970	7100	1460	444	730
15	245	280	246	270	346	480	1250	2100	6260	1310	486	649
16	245	268	250	238	336	526	1460	2110	5620	1230	514	593
17	241	263	254	220	319	474	1550	2140	5240	1160	491	543
18	242	257	254	220	352	491	1720	2470	5530	1100	457	508
19	243	266	250	223	552	551	2070	2600	5790	1040	430	465
20	246	278	239	230	573	577	2390	3100	5800	990	406	445
21	325	266	241	202	453	660	2700	3820	5600	921	391	425
22	314	254	252	182	427	704	3130	4930	5200	861	387	404
23	289	260	238	198	391	667	3080	5520	4800	848	409	397
24	288	265	246	195	350	630	2660	5690	4900	830	575	387
25	300	270	250	209	343	598	2210	4610	5000	866	977	371
26	288	274	242	223	339	500	2180	3840	4800	882	950	355
27	269	290	265	209	353	504	2300	3680	4500	886	789	343
28	267	281	247	209	382	565	2400	3790	4200	822	669	332
29	262	300	236	220	419	486	2720	4100	3900	758	588	320
30	262	290	222	220	---	516	2830	4340	3400	726	555	311
31	272	---	216	206	---	563	---	4650	---	710	519	---
TOTAL	8130	8302	7879	6520	9135	15222	48721	100770	164910	46110	16907	15941
MEAN	262	277	254	210	315	491	1624	3251	5497	1487	545	531
MAX	325	304	290	270	573	704	3130	5690	7820	3300	977	1630
MIN	241	254	216	182	202	373	480	1970	3400	710	387	311
AC-FT	16130	16470	15630	12930	18120	30190	96640	199900	327100	91460	33540	31620

CAL YR 1979 TOTAL 524803 MEAN 1438 MAX 8330 MIN 140 AC-FT 1041000
WTR YR 1980 TOTAL 448547 MEAN 1226 MAX 7820 MIN 182 AC-FT 889700

09365500 LA PLATA RIVER AT HESPERUS, CO

LOCATION.--Lat 37°17'23", long 108°02'24", in NE¼SW¼ sec.14, T.35 N., R.11 W., La Plata County, Hydrologic Unit 14080105, on right bank at Hesperus 700 ft (213 m) downstream from U.S. Highway 160.

DRAINAGE AREA.--37 mi² (96 km²), approximately.

PERIOD OF RECORD.--June to August 1904, May 1905 to September 1906, August to November 1910, June 1917 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for Nov. 11 to Dec. 31, 1910, published in WSP 289, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1243: 1906(M). WSP 1563: 1923 (monthly figures only). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 8,104.71 ft (2,470.316 m), National Geodetic Vertical Datum of 1929. Prior to May 1, 1920, nonrecording gage, and May 1, 1920, to May 24, 1927, water-stage recorder, at several sites about 600 ft (180 m) downstream at different datums. May 25, 1927, to Sept. 30, 1938, water-stage recorder at site 60 ft (18 m) downstream and Oct. 1, 1938, to Sept. 30, 1941, at present site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good. Cherry Creek ditch exports water above station for irrigation of about 2,000 acres (8.09 km²) in Cherry Creek drainage. Several observations of water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--64 years (water years 1906, 1918-80), 44.8 ft³/s (1.269 m³/s), 32,460 acre-ft/yr (40.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,880 ft³/s (53.2 m³/s) Sept. 22, 1941, gage height, 4.30 ft (1.311 m), present datum, from rating curve extended above 620 ft³/s (18 m³/s), on basis of slope-area measurement of peak flow; maximum gage height, 5.13 ft (1.564 m) Sept. 6, 1970; no flow part of Oct. 24, 1966, caused by filling of pond upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood observed occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 230 ft³/s (6.5 m³/s) and maximum (*):

Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)	Date	Time	Discharge (ft³/s)	Discharge (m³/s)	Gage height (ft)	Gage height (m)
June 11	0200	938	26.6	4.13	1.259	Sept. 10	1330	340	9.6	3.25	0.991

Minimum daily discharge, 4.0 ft³/s (0.113 m³/s) Feb. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	6.6	4.5	5.8	5.8	6.0	7.3	166	322	228	18	16
2	8.2	6.6	5.0	5.5	5.8	6.0	7.3	147	246	181	17	16
3	8.2	6.6	5.2	5.0	5.8	6.0	7.7	147	352	155	16	15
4	7.7	6.9	5.2	5.0	6.2	6.2	8.2	175	440	136	18	14
5	7.7	6.9	5.5	5.5	5.0	6.2	8.6	196	463	118	18	15
6	7.3	6.9	5.5	5.8	5.0	5.8	9.5	219	485	93	18	14
7	7.3	7.3	5.5	5.8	5.5	6.2	10	260	395	81	16	14
8	6.9	7.7	5.5	6.2	4.8	6.2	10	264	381	86	13	14
9	6.9	7.7	6.2	5.5	4.5	6.2	10	222	518	78	14	18
10	6.9	7.3	6.2	6.0	4.0	6.2	12	169	587	64	14	228
11	6.9	6.9	5.5	6.5	4.0	5.8	12	147	581	59	14	147
12	6.9	6.9	4.8	6.5	4.5	6.2	12	120	557	56	16	73
13	6.9	6.6	5.5	6.6	4.5	6.2	12	111	664	51	16	48
14	6.9	6.6	5.5	7.3	5.5	6.2	14	95	605	38	17	37
15	6.9	6.2	5.5	6.9	5.8	6.2	17	95	496	38	18	31
16	6.6	5.5	5.5	6.2	6.0	6.2	21	91	460	34	20	26
17	6.6	4.8	5.5	6.2	6.0	6.2	28	105	496	34	19	22
18	6.6	6.2	5.2	6.2	6.0	6.2	50	129	501	34	18	19
19	6.6	6.6	5.2	6.5	6.0	6.2	103	166	470	35	17	16
20	8.0	6.6	5.2	6.2	6.0	6.2	160	236	440	32	16	16
21	8.6	6.0	5.8	6.0	5.5	6.9	260	332	386	28	16	15
22	7.3	5.5	6.2	5.5	5.5	7.3	250	430	386	26	14	15
23	6.9	5.0	5.0	5.0	5.5	7.3	239	445	376	29	18	15
24	6.9	5.5	4.5	4.5	5.5	6.9	160	419	379	37	18	44
25	6.6	5.5	5.0	4.5	5.5	7.3	113	236	318	34	15	14
26	6.2	4.8	5.2	5.0	5.5	7.3	111	193	309	31	14	14
27	6.2	5.0	5.5	6.0	6.0	6.9	134	184	304	28	18	13
28	6.2	4.5	5.5	6.0	6.0	6.9	199	193	253	24	18	13
29	6.2	4.5	5.5	6.5	6.0	6.9	236	268	232	19	18	14
30	6.6	4.5	5.0	5.8	---	6.9	206	332	239	18	18	13
31	6.6	---	5.5	5.8	---	6.9	---	322	---	19	17	---
TOTAL	218.9	184.2	166.4	181.8	157.7	200.1	2427.6	6614	12641	1924	519	939
MEAN	7.06	6.14	5.37	5.86	5.44	6.45	80.9	213	421	62.1	16.7	31.3
MAX	8.6	7.7	6.2	7.3	6.2	7.3	260	445	664	228	20	228
MIN	6.2	4.5	4.5	4.5	4.0	5.8	7.3	91	232	18	13	13
AC-FT	434	365	330	361	313	397	4820	13120	25070	3820	1030	1860

CAL YR 1979 TOTAL 24603.1 MEAN 67.4 MAX 848 MIN 4.0 AC-FT 48800
WTR YR 1980 TOTAL 26173.7 MEAN 71.5 MAX 664 MIN 4.0 AC-FT 51920

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'51", long 108°11'17", in NW¼SE¼ sec.10, T.32 N., R.13 W., La Plata County, CO, Hydrologic Unit 14080105, on right bank at Colorado-New Mexico State line, 0.2 mi (0.3 km) downstream from Ponds Arroyo, and 4.6 mi (7.7 km) north of La Plata, NM.

DRAINAGE AREA.--331 mi² (857 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1920 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1934(M), 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 5,975.15 ft (1,821.226 m), National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 17, 1934.

REMARKS.--Records good. Diversions above station for irrigation of about 15,000 acres (60.7 km²), mostly above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Records collected and computed by Colorado Division of Water Resources and reviewed by Geological Survey.

AVERAGE DISCHARGE.--60 years, 34.9 ft³/s (0.988 m³/s), 25,280 acre-ft/yr (31.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,705 ft³/s (135 m³/s) Aug. 24, 1927, gage height, 11.36 ft (3.463 m), present datum, from rating curve extended above 750 ft³/s (21 m³/s), on basis of slope-area measurement of peak flow; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,580 ft³/s (44.7 m³/s) Apr. 23, gage height, 5.79 ft (1.765 m), from floodmarks; minimum daily, 1.2 ft³/s (0.034 m³/s) Oct. 7, 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	5.8	8.5	9.0	16	39	41	503	325	78	13	5.4
2	1.8	5.8	9.0	9.0	16	41	50	425	302	84	13	5.1
3	1.6	5.8	10	9.0	16	44	45	368	288	73	12	3.2
4	2.1	5.4	11	9.0	18	45	48	485	338	55	10	3.2
5	2.4	5.4	11	8.5	16	41	55	491	382	41	9.0	3.2
6	1.6	5.4	10	9.0	16	41	82	482	408	36	9.0	4.1
7	1.2	5.8	10	9.0	18	45	101	548	315	44	9.0	5.4
8	1.4	7.5	10	9.0	18	41	91	618	275	72	8.0	5.8
9	1.4	7.5	10	9.5	16	39	120	491	340	60	6.6	9.0
10	1.2	7.0	10	11	14	39	167	408	400	50	6.6	70
11	1.4	6.6	11	10	13	45	224	388	431	50	6.2	129
12	1.6	6.6	11	11	14	44	175	338	360	56	5.1	42
13	2.4	6.6	9.0	12	15	38	166	272	305	56	5.1	26
14	3.5	6.6	9.0	15	21	39	180	248	278	46	5.8	30
15	2.9	7.0	9.0	19	26	41	258	250	218	41	6.6	27
16	2.4	7.0	9.0	18	28	44	340	265	184	38	6.2	23
17	2.6	7.0	9.0	17	28	38	408	222	175	38	5.4	19
18	2.4	7.5	9.0	19	33	41	491	224	182	38	5.1	17
19	2.4	7.5	9.0	23	43	42	544	238	200	36	4.8	13
20	3.9	7.5	9.0	21	61	41	635	275	192	34	4.4	12
21	9.0	7.5	10	18	44	45	858	395	160	26	4.1	10
22	5.8	7.0	10	17	42	53	1080	494	155	21	3.8	9.0
23	5.4	7.0	9.5	14	37	51	1020	568	145	19	12	9.0
24	5.1	7.0	9.5	13	31	48	691	503	135	21	20	10
25	5.1	8.0	10	14	29	53	479	375	117	23	11	10
26	4.8	8.5	10	15	36	44	322	292	100	21	8.5	9.0
27	5.1	9.0	12	16	37	48	476	242	103	19	7.0	8.5
28	5.4	8.5	10	16	38	50	530	265	103	17	5.8	7.0
29	5.4	8.5	10	16	40	44	621	278	83	16	6.2	6.2
30	5.8	8.5	9.5	19	---	44	607	282	77	16	5.8	5.8
31	5.8	---	9.5	15	---	47	---	315	---	14	5.4	---
TOTAL	104.5	210.8	303.5	430.0	780	1355	10905	11548	7076	1239	240.5	536.9
MEAN	3.37	7.03	9.79	13.9	26.9	43.7	364	373	23[illegible]	40.0	7.76	17.9
MAX	9.0	9.0	12	23	61	53	1080	618	431	84	20	129
MIN	1.2	5.4	8.5	8.5	13	38	41	222	77	14	3.8	3.2
AC-FT	207	418	602	853	1550	2690	21630	22910	14040	2460	477	1060

CAL YR 1979 TOTAL 31028.8 MEAN 85.0 MAX 834 MIN 1.0 AC-FT 61550
WTR YR 1980 TOTAL 34729.2 MEAN 94.9 MAX 1080 MIN 1.2 AC-FT 68890

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to current year.

REMARKS.--Chemical data obtained on infrequent schedule from 1970 to 1973 water years.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT											
30...	0840	5.8	1450	8.2	6.0	--	10.0	10	88	K48	710
NOV											
27...	1130	9.0	1450	8.1	4.0	--	10.5	--	K3	K39	840
DEC											
31...	0900	8.0	1650	8.0	1.0	--	11.3	27	78	--	840
FEB											
05...	1300	26	1590	8.3	5.0	--	10.2	17	11	K140	810
MAR											
11...	0835	45	1300	8.4	2.0	--	11.1	20	K18	K9	880
APR											
14...	1705	139	1150	8.1	13.5	200	8.1	64	K77	K66	600
MAY											
12...	1510	196	600	7.9	11.0	--	9.2	39	28	K38	300
JUN											
09...	1530	446	336	7.5	17.0	320	7.7	76	260	140	160
30...	1230	83	740	8.0	23.0	--	7.0	10	82	110	340
JUL											
28...	1500	18	1200	7.9	24.0	--	7.5	11	60	K42	610
SEP											
08...	1305	5.8	1250	8.2	22.0	--	7.0	12	K40	K100	620

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT											
30...	510	190	81	60	1.0	2.7	200	620	38	.3	12
NOV											
27...	620	180	96	75	1.1	3.6	220	660	39	.3	14
DEC											
31...	620	184	91	65	1.1	2.8	220	700	39	.3	14
FEB											
05...	590	170	93	62	1.0	2.7	220	680	38	.3	11
MAR											
11...	650	170	110	64	.9	2.5	230	710	34	.3	9.6
APR											
14...	420	118	76	45	.9	3.4	180	470	22	.2	10
MAY											
12...	190	63	34	22	.6	2.1	110	200	11	.1	10
JUN											
09...	70	37	16	15	.6	1.3	89	82	3.9	.0	7.0
30...	200	72	40	27	.6	1.8	140	240	11	.2	9.6
JUL											
28...	420	120	75	50	.9	2.8	190	460	21	.4	9.9
SEP											
08...	440	130	72	54	.9	2.6	180	520	35	.4	11

K BASED ON NON-IDEAL COLONY COUNT.

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT 30...	1150	1000	1.5	18.0	.47	.060	.37	.43	.90	.000	.000
NOV 27...	1230	1200	1.6	29.9	.63	.060	.46	.52	1.2	.010	.000
DEC 31...	1260	1230	1.7	27.2	1.1	.030	.64	.67	1.8	.020	.010
FEB 05...	1420	1190	1.9	99.7	.88	.110	.59	.70	1.6	.040	.020
MAR 11...	1320	1240	1.8	160	.53	.030	.48	.51	1.0	.020	.000
APR 14...	919	--	1.2	345	.47	.060	1.7	1.80	2.3	.470	.030
MAY 12...	419	409	.57	222	.32	.020	1.1	1.10	1.4	.270	.020
JUN 09...	207	216	.28	249	.11	.070	2.2	2.30	2.4	.080	.010
30...	514	496	.70	115	.00	.000	.41	.41	.41	.020	.010
JUL 28...	926	854	1.2	45.0	.03	.080	.87	.95	.98	.020	.010
SEP 08...	1070	933	1.4	16.8	.04	.030	1.4	1.40	1.4	.030	.010

DATE	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	BIOMASS CHLORO-PHYLL RATIO PERI-PHYTON (UNITS)	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)
OCT 30...	60	20	--	7.3	.2	180	--	--	--	--	--
NOV 27...	60	20	--	19	.1	1200	--	--	--	--	--
DEC 31...	60	11	--	6.5	.9	210	--	--	--	--	--
FEB 05...	70	20	--	10	.8	2100	.000	.000	.00	.040	.000
MAR 11...	50	10	--	6.3	.1	1200	--	--	--	--	--
APR 14...	60	:10	--	6.7	.3	6500	--	--	--	--	--
MAY 12...	40	320	--	4.0	.5	3200	.000	.079	--	.000	.000
JUN 09...	30	51	6.2	--	--	2100	--	--	--	--	--
30...	60	20	--	7.6	.3	1300	--	--	--	--	--
JUL 28...	160	20	--	9.5	.6	2000	--	--	--	--	--
SEP 08...	70	20	--	19	.1	450	--	--	--	--	--

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BERYL-LIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
DEC 31...	0900	20	--	1	--	--	60	--	--	<1	--
APR 14...	1705	20	--	1	4	--	80	20	--	<1	1
JUN 09...	1530	90	13	1	--	400	40	--	0	<1	--

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)
DEC 31...	--	< 1	--	--	0	--	--	< 3	--	< 10	--
APR 14...	--	< 1	1	--	0	3	--	< 3	10	< 10	25
JUN 09...	1	< 1	--	10	0	--	18	< 3	--	< 10	--

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MANGA-NESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)
DEC 31...	--	2	--	--	34	--	48	--	--	.0	--
APR 14...	--	23	10	--	22	--	67	200	--	.0	.04
JUN 09...	54	< 10	--	20	9	1300	13	--	.1	.0	--

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	MOLYB-DENUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)
DEC 31...	--	< 10	--	--	0	--	--	3	--	1000	< 6.0
APR 14...	--	< 10	4	--	5	10	--	3	0	760	< 6.0
JUN 09...	0	< 10	--	24	3	--	2	1	--	320	< 6.0

DATE	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)
DEC 31...	--	< 3	--	--	--	--	--	--	--	--	--
APR 14...	--	< 3	30	--	--	--	--	--	--	--	--
JUN 09...	160	< 3	--	< 2.4	57	< 3.5	84	< 1.5	56	< 1.5	54

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT 30...	0840	6.0	5	.08
NOV 27...	1130	9.0	6	.15
FEB 05...	1300	26	59	4.1
MAR 11...	0835	45	72	8.7
APR 14...	1705	139	973	365
MAY 12...	1510	196	1110	587
JUN 09...	1530	446	2050	2470
30...	1230	83	22	4.9
JUL 28...	1500	18	22	1.1
AUG 27...	0810	8.0	30	.65
SEP 08...	1305	6.0	8	.13

BEST DOCUMENT AVAILABLE

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	OCT 30,79		NOV 27,79		DEC 31,79		JAN 27,80		FEB 5,80		MAR 11,80	
TIME	0840		1130		0900		1330		1300		0835	
TOTAL CELLS/ML	180		1200		210		7200		2100		1200	
DIVERSITY: DIVISION	0.0		0.0		0.2		0.1		0.1		0.2	
.CLASS	0.0		0.0		0.2		0.1		0.1		0.2	
..ORDER	0.0		0.2		0.2		0.3		0.1		0.7	
...FAMILY	1.5		2.3		2.0		2.7		2.0		2.9	
....GENUS	1.5		2.3		2.0		2.7		2.1		3.0	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHLOROCOCCACEAE												
....CHLOROCOCCUM	--	-	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	--	-	--	-	--	-	--	-	--	-	44	4
....SELENASTRUM	--	-	--	-	--	-	--	-	--	-	--	-
...SCENEDESMACEAE												
....SCENEDESMUS	--	-	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	--	-	--	-	--	-	130	2	--	-	--	-
...VOLVOCACEAE												
....PANDORINA	--	-	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	--	-	33	3	--	-	200	3	19	1	120	10
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	100#	57	260#	23	--	-	130	2	--	-	62	5
....COCCONEIS	--	-	--	-	--	-	67	1	--	-	18	2
...CYMBELLACEAE												
....CYMBELLA	13	7	360#	31	91#	43	2400#	33	170	8	170	15
...DIATOMACEAE												
....DIATOMA	--	-	--	-	--	-	--	-	--	-	9	1
....OPEPHORA	--	-	--	-	--	-	--	-	1100#	52	--	-
...FRAGILARIACEAE												
....ASTERIONELLA	--	-	--	-	--	-	--	-	--	-	--	-
....SYNEDRA	--	-	33	3	5	2	200	3	57	3	18	2
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	11	1	5	2	870	12	190	9	140	12
...NAVICULACEAE												
....NAVICULA	13	7	180#	15	40#	19	940	13	76	4	110	9
....PLEUROSIGMA	--	-	--	-	--	-	--	-	19	1	--	-
...NITZSCHIACEAE												
....NITZSCHIA	52#	29	290#	25	60#	29	870	12	460#	22	340#	29
...SURIRELLACEAE												
....SURIRELLA	--	-	--	-	5	2	1400#	20	--	-	130	12
.CHRYSOPHYCEAE												
..CHRYSOMONADALES												
...OCHROMONADACEAE												
....OCHROMONAS	--	-	--	-	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOMONADACEAE												
....CRYPTOMONAS	--	-	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	--	-	--	-	--	-	--	-	--	-
..HORMOGONALES												
...NOSTOCACEAE												
....APHANIZOMENON	--	-	--	-	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE												
....LYNGBYA	--	-	--	-	--	-	--	-	--	-	--	-
....OSCILLATORIA	--	-	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	--	-	--	-	--	-	--	-	--	-	--	-
....EUTREPTIA	--	-	--	-	5	2	--	-	--	-	--	-
...PETALOMONADACEAE												
....CALYCOMONAS	--	-	--	-	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)												
.DINOPHYCEAE												
..PERIDINIALES												
...GLENODINIACEAE												
....GLENODINIUM	--	-	--	-	--	-	--	-	19	1	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

BEST DOCUMENT AVAILABLE

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	APR 14.80		MAY 12.80		JUN 9.80		JUN 30.80		JUL 28.80		SEP 8.80	
TIME	1705		1510		1530		1230		1500		1305	
TOTAL CELLS/ML	6500		3200		2100		1300		2000		450	
DIVERSITY: DIVISION	1.2		0.9		1.3		0.9		1.2		0.2	
.CLASS	1.2		1.1		1.3		0.9		1.2		0.2	
..ORDER	1.2		1.1		1.3		1.0		1.5		0.5	
...FAMILY	1.8		1.7		2.2		2.2		2.1		1.8	
....GENUS	1.8		1.7		2.2		2.2		2.1		1.8	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHLOROCOCCACEAE												
....CHLOROCOCCUM	--	-	--	-	--	-	--	-	13	1	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	430	7	--	-	--	-	--	-	--	-	--	-
....SELENASTRUM	--	-	--	-	--	-	--	-	13	1	--	-
...SCENEDESMACEAE												
....SCENEDESMUS	--	-	--	-	--	-	--	-	51	3	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	--	-	13	3
...VOLVOCACEAE												
....PANDORINA	--	-	--	-	--	-	210^3	16	--	-	--	-
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	--	-	--	-	--	-	39	3	64	3	26	6
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	860	13	--	-	140	7	--	-	150	8	13	3
....COCCONEIS	--	-	--	-	--	-	--	-	--	-	--	-
...CYMBELLACEAE												
....CYMBELLA	140	2	--	-	--	-	13	1	600^3	30	230^3	51
...DIATOMACEAE												
....DIATOMA	--	-	--	-	--	-	13	1	--	-	--	-
....OPEPHORA	--	-	--	-	--	-	--	-	--	-	--	-
...FRAGILARIACEAE												
....ASTERIONELLA	--	-	--	-	--	-	13	1	--	-	--	-
....SYNEDRA	140	2	--	-	--	-	90	7	--	-	--	-
...GOMPHONEMATACEAE												
....GOMPHONEMA	140	2	140	4	270	13	26	2	--	-	--	-
...NAVICULACEAE												
....NAVICULA	140	2	270	9	270	13	170	13	77	4	39	9
....PLEUROSIGMA	--	-	--	-	--	-	--	-	--	-	--	-
...NITZSCHIACEAE												
....NITZSCHIA	140	2	140	4	270	13	690^3	53	51	3	130^3	29
...SURIRELLACEAE												
....SURIRELLA	140	2	410	13	--	-	--	-	--	-	--	-
.CHRYSOPHYCEAE												
..CHRYSOMONADALES												
...OCHROMONADACEAE												
....OCHROMONAS	--	-	140	4	--	-	--	-	--	-	--	-
CRYPTOPHYTA (CRYPTOMONADS)												
.CRYPTOPHYCEAE												
..CRYPTOMONADALES												
...CRYPTOMONADACEAE												
....CRYPTOMONAS	--	-	--	-	--	-	13	1	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..CHROOCOCCALES												
...CHROOCOCCACEAE												
....ANACYSTIS	--	-	--	-	--	-	13	1	39	2	--	-
..HORMOGONALES												
...NOSTOCACEAE												
....APHANIZOMENON	4300^3	67	--	-	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE												
....LYNGBYA	--	-	--	-	960^3	47	--	-	--	-	--	-
....OSCILLATORIA	--	-	2100^3	65	--	-	--	-	960^3	47	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	--	-	--	-	140	7	--	-	--	-	--	-
....EUTREPTIA	--	-	--	-	--	-	--	-	--	-	--	-
...PETALOMONADACEAE												
....CALYCOMONAS	--	-	--	-	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)												
.DINOPHYCEAE												
..PERIDINIALES												
...GLENODINIACEAE												
....GLENODINIUM	--	-	--	-	--	-	13	1	--	-	--	-

NOTE: ^{3} - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09370820 MANCOS RIVER BELOW JOHNSON CANYON, NEAR CORTEZ, CO

LOCATION.--Lat 37°05'57", long 108°27'56", in NE¼ sec.15, T.33 N., R.15 W., Montezuma County, Hydrologic Unit 14080107, on right bank downstream from bridge, 600 ft (183 m) downstream from Johnson Canyon, 16 mi (26 km) southeast of Towac, and 18 mi (29 km) southeast of Cortez.

DRAINAGE AREA.--320 mi^2 (829 km^2).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1979 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,670 ft (1,728 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Flow regulated by Jackson Gulch Reservoir, capacity 10,000 acre-ft (12.3 hm^3) 20 mi (32 km) upstream on Jackson Canyon. Reservoir is fed by water diverted from the West Mancos River. Diversions for irrigation of about 12,000 acres (49 km^2) above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,070 ft^3/s (30.3 m^3/s) May 23, 1980, gage height, 4.88 ft (1.487 m); minimum daily, 7.8 ft^3/s (0.221 m^3/s) Oct. 4, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,070 ft^3/s (30.3 m^3/s) at 0700 May 23, gage height, 4.88 ft (1.487 m); minimum daily, 7.8 ft^3/s (0.221 m^3/s) Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	11	15	13	22	77	49	384	480	118	12	21
2	8.6	10	15	15	24	74	57	305	428	126	12	21
3	8.2	10	15	12	25	75	52	300	428	102	12	21
4	7.8	10	16	13	22	68	80	310	460	84	13	20
5	8.2	10	16	11	23	57	136	340	496	72	13	21
6	8.2	10	16	12	20	56	213	364	480	63	13	23
7	8.2	11	16	14	23	63	216	480	404	57	13	47
8	8.2	13	16	13	18	48	123	660	392	57	14	29
9	8.6	16	16	13	16	47	154	528	448	52	13	38
10	8.6	13	16	16	14	48	245	384	468	48	11	92
11	8.6	11	17	17	16	62	247	352	496	44	11	131
12	8.6	10	14	18	21	57	152	332	448	40	18	72
13	8.6	10	11	22	21	41	150	263	428	38	13	47
14	8.6	11	13	41	23	54	152	240	380	34	13	34
15	9.4	12	14	63	47	84	291	275	317	32	18	29
16	9.4	10	13	41	58	103	334	340	287	28	24	29
17	9.4	11	13	35	70	62	380	308	266	24	17	26
18	9.8	11	12	28	62	62	408	352	287	24	13	25
19	9.8	14	12	26	225	78	492	376	281	22	13	24
20	9.4	14	12	23	168	74	544	448	269	22	12	21
21	26	12	15	21	101	121	635	625	242	20	10	20
22	24	12	16	18	71	154	755	745	245	17	11	20
23	16	11	15	22	63	105	720	868	238	15	13	22
24	13	14	17	18	50	94	516	675	215	13	23	23
25	13	16	16	19	46	91	348	464	195	12	43	22
26	12	16	18	20	47	68	348	392	182	11	33	21
27	12	13	18	23	54	77	380	300	172	11	28	22
28	11	14	17	20	64	75	380	340	160	10	25	22
29	11	15	16	13	78	58	452	404	140	10	23	21
30	11	16	16	22	---	64	512	484	122	11	22	20
31	11	---	14	22	---	65	---	488	---	12	21	---
TOTAL	335.6	367	466	664	1492	2262	9521	13126	9854	1229	530	984
MEAN	10.8	12.2	15.0	21.4	51.4	73.0	317	423	328	39.6	17.1	32.8
MAX	26	16	18	63	225	154	755	868	496	126	43	131
MIN	7.8	10	11	11	14	41	49	240	122	10	10	20
AC-FT	666	728	924	1320	2960	4490	18880	26040	19550	2440	1050	1950

WTR YR 1980 TOTAL 40830.6 MEAN 112 MAX 868 MIN 7.8 AC-FT 80990

09370820 MANCOS RIVER BELOW JOHNSON CANYON, NEAR CORTEZ, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1979 to current year.
WATER TEMPERATURES: June 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since June 1979.

REMARKS.--Daily maximum and minimum specific conductance available in district office. This station provides equivalent record for station 09370800 located 0.8 mi (0.6 km) upstream, discontinued June 1979.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,940 micromhos Aug. 15, 1980; minimum, 269 micromhos June 11, 1980.
WATER TEMPERATURES: Maximum, 33.5°C Aug. 11, 1979; minimum, freezing point on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,940 micromhos Aug. 15; minimum, 269 micromhos June 11.
WATER TEMPERATURES: Maximum, 30.0°C July 29, Aug. 6; minimum, freezing point many days during November to February.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS)	SPECIFIC CONDUCTANCE (UMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARDNESS (MG/L AS CACO3)	HARDNESS, NONCARBONATE (MG/L CACO3)
OCT								
05...	0910	8.0	2100	7.4	9.0	9.0	1200	990
NOV								
05...	0800	10	2250	7.8	3.0	10.8	1300	1100
DEC								
07...	1200	21	2100	8.2	.5	11.6	1200	1000
FEB								
04...	1000	16	1950	8.1	.0	11.6	1000	790
MAR								
11...	0750	68	2200	8.0	5.0	10.2	1100	920
APR								
14...	1245	146	1040	7.8	9.5	8.9	430	290
MAY								
06...	0900	361	520	7.1	7.0	9.4	200	120
JUN								
06...	0900	541	285	7.5	8.0	9.5	120	55
JUL								
16...	1100	24	1600	7.9	15.0	7.6	780	610
AUG								
20...	0840	11	2120	8.0	14.5	8.0	970	810

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)
OCT									
05...	220	150	150	1.9	4.4	180	1300	20	.2
NOV									
05...	240	160	170	2.1	4.3	160	1400	21	.1
DEC									
07...	250	150	140	1.7	3.9	220	1200	20	.2
FEB									
04...	210	120	150	2.0	3.8	230	970	37	.2
MAR									
11...	210	150	180	2.3	5.4	220	1300	27	.3
APR									
14...	96	45	62	1.3	3.5	140	420	9.0	.2
MAY									
06...	45	21	30	.9	1.9	79	170	3.6	.2
JUN									
06...	31	9.2	14	.6	1.5	60	76	2.3	.2
JUL									
16...	160	93	110	1.7	4.4	170	820	13	.3
AUG									
20...	190	120	140	2.0	4.6	160	1100	12	.2

09370820 MANCOS RIVER BELOW JOHNSON CANYON NEAR CORTEZ. CO--Continued

WATER-QUALITY DATA. WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SILICA. DIS- SOLVED (MG/L AS SIO2)	SOLIDS. SUM OF CONSTI- TUENTS. DIS- SOLVED (MG/L)	SOLIDS. DIS- SOLVED (TONS PER AC-FT)	SOLIDS. DIS- SOLVED (TONS PER DAY)	NITRO- GEN. NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS. DIS- SOLVED (MG/L AS P)	IRON. DIS- SOLVED (UG/L AS FE)	MANGA- NESE. DIS- SOLVED (UG/L AS MN)
OCT								
05...	9.4	1960	2.6	42.8	.49	.000	40	20
NOV								
05...	9.7	2090	2.8	57.6	.86	.000	70	40
DEC								
07...	11	1910	2.6	108	1.1	.010	60	50
FEB								
04...	9.5	1640	2.2	71.7	1.0	.010	50	50
MAR								
11...	13	2020	2.7	372	.77	.010	60	50
APR								
14...	8.1	729	.99	287	.25	.020	30	10
MAY								
06...	8.8	333	.45	325	1.0	.010	70	7
JUN								
06...	7.0	179	.24	261	.33	.010	50	8
JUL								
16...	6.8	1310	1.7	86.3	.31	.010	10	20
AUG								
20...	4.4	1670	2.2	53.2	.00	.010	40	40

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C). WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2060	2360	2650	2280	2100	1900	1700	501	307	832	2150	1670
2	2100	2310	2600	2240	2150	1900	1660	528	338	846	2140	1640
3	2220	2270	2480	2280	2090	1930	1670	527	358	963	2130	1620
4	2230	2260	2340	2280	2100	1960	1610	516	335	1100	2170	1620
5	2180	2250	2150	2220	2090	2000	1540	511	317	1190	2150	1620
6	2180	2250	2120	2280	2250	2020	1270	512	301	1280	2130	1590
7	2160	2240	1980	2410	2220	2050	1120	502	311	1370	2160	1530
8	2190	2220	1950	2340	2170	2090	1240	503	335	1520	2160	1500
9	2140	2240	1930	2280	2270	2120	1080	494	313	1550	2150	1440
10	2160	2260	1960	2110	2310	2150	1110	495	304	1600	2210	1370
11	2200	2280	1990	1870	2300	2070	956	514	298	1570	2330	1140
12	2250	2290	1930	2070	2390	2020	966	518	312	1640	2410	1150
13	2270	2310	2050	2070	2270	2050	981	535	317	1720	2020	1290
14	2290	2290	1990	1790	2150	2050	945	549	337	1700	2240	1510
15	2300	2260	2220	1550	1870	1680	669	540	358	1710	2510	1530
16	2300	2250	1860	1830	2070	1620	603	566	388	1750	2090	1550
17	2300	2230	2050	2020	2120	1660	573	529	408	1770	2110	1550
18	2300	2230	2130	2080	2210	1690	556	478	394	1820	2260	1580
19	2300	2220	2010	2060	1940	1660	532	451	387	1840	2390	1590
20	2310	2220	1910	2010	1930	1650	510	420	401	1890	2450	1600
21	2260	2260	2030	2060	2130	1650	494	390	452	1930	2460	1640
22	2270	2310	2170	2160	2240	1470	482	366	467	1960	2510	1650
23	2300	2450	2180	2300	2330	1550	473	350	473	2000	2440	1640
24	2320	2550	2040	2250	2400	1630	482	344	510	2050	2270	1610
25	2350	2460	1960	2210	2440	1740	527	357	573	2080	2010	1640
26	2370	2260	2080	2130	2410	1770	535	368	602	2040	1710	1670
27	2390	2220	2140	2060	2260	1850	517	375	598	2040	1720	1670
28	2400	2250	2260	2050	2140	1820	515	375	631	2090	1730	1670
29	2390	2300	2230	2060	2000	1870	498	362	695	2120	1710	1710
30	2380	2500	2250	2030	---	1880	490	331	781	2170	1680	1750
31	2380	---	2300	2020	---	1770	---	317	---	2160	1670	---

09370820 MANCOS RIVER BELOW JOHNSON CANYON NEAR CORTEZ, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	22.0	9.0	---	---	.5	.5	.5	.0	1.0	.0	7.0	2.0
2	19.5	9.0	---	---	.5	.5	---	---	1.5	.0	7.0	2.5
3	20.5	9.5	---	---	1.0	.5	---	---	2.5	.0	5.5	4.0
4	21.5	9.0	---	---	1.0	.5	.5	.0	4.0	.0	5.5	3.0
5	18.0	8.0	---	3.0	1.5	.5	.5	.0	4.0	.0	6.0	1.5
6	22.5	8.0	---	---	1.0	.5	.0	.0	3.5	.0	6.5	3.0
7	23.5	11.5	---	---	1.5	.5	.0	.0	5.0	.5	5.0	3.0
8	23.0	7.5	---	---	1.5	.5	.5	.0	4.0	1.5	5.5	1.5
9	22.5	8.0	8.5	3.5	1.5	.5	.5	.0	5.5	.5	7.5	1.0
10	18.5	8.0	6.5	3.0	1.5	.5	.0	.0	4.0	.0	8.5	2.0
11	23.0	8.0	7.5	3.0	1.5	.0	.0	.0	5.5	.0	6.5	4.5
12	23.5	10.0	7.0	2.0	1.5	.5	.5	.0	2.0	.0	---	---
13	15.0	8.0	6.0	1.5	1.0	.5	.5	.0	2.5	.0	---	---
14	---	---	6.0	1.5	1.0	.5	1.0	.0	3.0	1.0	---	---
15	---	---	5.5	1.0	.5	.5	1.0	.0	4.5	1.5	---	4.5
16	---	---	5.5	.5	.5	.0	2.0	.0	10.5	2.5	---	---
17	---	---	4.5	.5	.5	.0	2.0	.0	10.5	2.0	---	1.0
18	---	---	6.0	2.5	.5	.0	2.0	.0	13.5	3.5	9.0	2.0
19	---	---	5.0	2.0	.5	.0	2.5	.0	8.5	2.0	7.5	5.5
20	---	---	2.5	1.0	.5	.0	4.0	.0	4.0	1.0	9.5	3.0
21	---	---	2.5	.0	.5	.0	1.5	.0	3.5	1.5	9.5	3.5
22	---	---	1.0	.0	.5	.0	.5	.0	6.0	2.0	7.0	3.5
23	---	---	.0	.0	.5	.0	.0	.0	4.5	1.5	7.0	2.0
24	---	---	.0	.0	.0	.0	.5	.0	5.5	.5	6.0	2.5
25	---	---	.5	.0	1.0	.0	.5	.0	6.0	.5	6.0	3.0
26	---	---	1.5	.0	1.0	.0	2.0	.0	6.5	.5	6.5	.5
27	---	---	1.5	.0	.0	.0	2.5	.0	7.5	1.0	9.5	4.5
28	---	---	.5	.0	.5	.0	1.0	.0	7.0	1.5	7.0	3.5
29	---	---	.5	.0	1.0	.0	.0	.0	7.5	2.5	9.0	2.0
30	---	---	.5	.0	.5	.0	1.0	.0	---	---	8.5	3.0
31	---	---	---	---	.5	.0	.5	.0	---	---	5.5	2.5

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	.5	9.0	6.0	12.0	5.5	21.0	17.0	29.0	18.5		13.0
2	5.5	---	11.5	5.5	13.5	5.5	22.0	17.0	28.5	20.0		13.0
3	9.5	1.5	10.0	6.0	14.5	6.5	22.0	15.0	28.5	18.5		13.0
4	12.0	4.5	12.0	6.0	15.0	7.0	23.0	15.0	28.5	19.0		12.0
5	11.5	6.0	10.0	6.5	15.0	7.0	23.5	14.0	29.0	17.5		15.0
6	11.5	6.0	11.0	6.5	14.0	7.5	22.0	14.5	30.0	18.5		---
7	9.0	4.0	10.5	7.0	14.5	7.5	22.0	17.0	29.0	19.5		---
8	10.5	3.5	11.0	6.0	17.0	8.5	25.0	16.5	28.0	19.5		---
9	10.0	5.0	9.5	6.5	17.5	8.5	24.5	16.5	28.0	18.0		---
10	12.0	6.0	8.0	6.5	17.5	8.5	22.5	17.0	27.5	17.0		---
11	10.0	5.5	8.0	7.0	16.5	8.0	27.0	17.0	---	17.0		---
12	8.5	5.5	9.0	4.5	16.5	8.0	27.5	18.5	---	19.0		---
13	14.0	5.0	10.5	4.5	16.5	8.5	21.5	18.5	---	19.0		---
14	11.5	6.0	11.5	7.5	16.5	8.5	25.0	16.0	21.5	18.0		---
15	11.0	5.0	9.5	7.5	16.0	8.0	25.5	15.0	24.5	17.5		---
16	11.0	4.0	13.5	6.0	17.0	9.0	25.5	14.5	---	15.5		---
17	10.5	3.0	14.5	9.0	18.0	10.0	25.5	15.0	---	14.5		12.5
18	11.5	3.5	14.0	7.0	18.0	11.0	27.5	16.0	---	15.0		---
19	12.5	4.0	15.0	7.5	18.5	12.5	27.0	19.5	---	17.0		---
20	12.0	4.5	15.0	7.0	17.0	10.0	28.5	17.5	---	14.0		---
21	9.5	6.0	15.0	6.5	18.5	12.5	29.0	17.5	23.0	12.0		9.0
22	11.0	5.0	13.5	7.0	19.0	12.0	28.0	18.5	---	13.0		7.5
23	9.0	5.5	12.5	6.0	19.0	12.0	29.5	18.0	---	17.0		6.5
24	7.5	4.0	10.0	6.0	19.0	12.5	27.0	18.0	---	---		6.0
25	10.0	5.5	10.5	3.5	19.5	12.5	28.0	18.0	---	15.0		5.5
26	11.0	6.0	11.0	4.5	20.5	15.0	28.0	18.0	---	15.5		8.5
27	9.5	5.5	12.0	5.5	20.5	14.0	27.0	17.0	---	14.5		9.5
28	12.5	6.0	13.5	6.0	20.5	13.5	28.5	15.5	---	15.0		8.0
29	10.0	6.0	13.5	6.5	22.0	14.5	30.0	18.0	---	15.5		7.0
30	10.0	5.5	13.5	5.5	22.5	17.5	28.5	19.0	27.5	14.0		6.0
31	---	---	13.5	6.0	---	---	29.5	18.5	25.5	12.5		

09371000 MANCOS RIVER NEAR TOWAOC, CO

LOCATION.--Lat 37°01'39", long 108°44'27", Ute Indian Reservation, Montezuma County, Hydrologic Unit 14080107, on left bank 700 ft (210 m) upstream from bridge on U.S. Highway 666, 2.0 mi (3.2 km) north of Colorado-New Mexico State line, 6.0 mi (9.7 km) upstream from Aztec Creek, and 12 mi (19 km) south of Towaoc.

DRAINAGE AREA.--550 mi^2 (1,420 km^2), approximately.

PERIOD OF RECORD.--October 1920 to September 1943, February 1951 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1733: 1924 (monthly figures only).

GAGE.--Water-stage recorder. Datum of gage is 5,055.98 ft (1,541.063 m), National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 11, 1954.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 10,000 acres (40.5 km^2) above station. One diversion above station for irrigation of about 100 acres (405,000 m^2) below. Flow regulated by Jackson Gulch Reservoir, capacity, 10,000 acre-ft (12.3 hm^3) since March 1949. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--52 years, 51.8 ft^3/s (1.467 m^3/s), 37,530 acre-ft/yr (46.3 hm^3/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,300 ft^3/s (150 m^3/s) Oct. 14 1941, gage height, 7.30 ft (2.225 m), present site and datum, from rating curve extended above 200 ft^3/s (5.7 m^3/s), on basis of slope-area measurement of peak flow; maximum gage height, 8.50 ft (2.591 m) Sept. 6, 1970; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft^3/s (20 m^3/s) and maximum (*):

Date	Time	Discharge (ft^3/s)	Discharge (m^3/s)	Gage height (ft)	Gage height (m)
Apr. 22	1200	970	27.5	4.61	1.405
May 8	1800	868	24.6	4.30	1.311
May 23	1700	*1,100	31.2	4.65	1.417

Minimum daily discharge, 0.28 ft^3/s (0.008 m^3/s) Oct. 7-9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.31	8.0	5.0	4.8	17	75	60	434	470	111	1.9	11
2	.31	7.2	4.7	5.5	20	71	61	329	430	114	1.9	12
3	.31	6.7	5.4	4.4	23	71	59	311	394	105	2.6	12
4	.31	6.7	5.0	4.8	22	70	74	329	402	82	2.4	12
5	.31	7.5	5.5	4.0	21	63	115	352	442	74	2.5	12
6	.31	7.5	6.0	4.4	20	57	189	342	458	66	3.2	12
7	.28	7.7	6.0	4.7	22	60	260	410	402	61	2.9	166
8	.28	8.7	5.5	7.0	22	56	145	635	366	56	2.5	40
9	.28	10	5.5	9.4	20	51	175	720	414	56	3.9	41
10	.31	11	5.5	12	16	48	206	510	438	50	3.6	49
11	.31	10	6.5	16	13	51	330	410	490	47	1.9	110
12	.31	9.4	5.5	18	12	57	273	426	478	43	1.2	89
13	.31	8.4	4.2	17	16	50	165	311	454	39	6.3	65
14	.31	7.7	4.6	26	22	45	165	263	434	39	1.8	44
15	.31	7.7	5.0	57	38	58	257	281	363	38	4.2	35
16	.31	8.0	4.8	57	55	101	356	317	302	29	13	29
17	.31	8.0	4.8	48	73	73	418	311	284	25	16	26
18	.31	8.4	4.4	42	64	58	458	366	284	20	8.4	23
19	.31	9.4	4.4	38	192	67	506	374	287	18	5.7	22
20	.39	10	4.6	39	284	69	542	418	269	15	5.0	20
21	11	10	5.5	31	134	97	610	538	245	11	4.5	18
22	23	7.7	6.0	25	102	154	730	705	232	7.7	3.4	17
23	15	6.2	5.5	16	73	117	730	892	225	6.7	4.1	18
24	9.4	7.5	6.0	22	56	104	585	770	202	5.0	8.4	18
25	8.4	9.4	6.0	26	46	92	382	498	187	3.6	23	18
26	7.7	11	7.0	26	44	77	346	370	179	4.5	31	17
27	7.5	8.4	8.5	28	47	77	374	335	169	3.4	22	18
28	7.5	6.4	8.0	28	54	78	382	349	159	2.6	16	19
29	7.7	6.4	5.5	30	67	67	438	374	141	1.9	14	18
30	8.0	5.2	5.5	20	---	68	514	466	122	1.4	12	17
31	8.0	---	5.0	23	---	70	---	494	---	.80	12	---
TOTAL	119.39	246.2	171.4	694.0	1595	2252	9905	13640	9722	1136.60	241.3	1008
MEAN	3.85	8.21	5.53	22.4	55.0	72.6	330	440	324	36.7	7.78	33.6
MAX	23	11	8.5	57	284	154	730	892	490	114	31	166
MIN	.28	5.2	4.2	4.0	12	45	59	263	122	.80	1.2	11
AC-FT	237	488	340	1380	3160	4470	19650	27050	19280	2250	479	2000

CAL YR 1979 TOTAL 45805.53 MEAN 125 MAX 1360 MIN .25 AC-FT 90860
WTR YR 1980 TOTAL 40730.89 MEAN 111 MAX 892 MIN .28 AC-FT 80790

09371400 HARTMAN DRAW AT CORTEZ, CO

LOCATION.--Lat 37°19'26", long 108°36'52", in NW¼NE¼ sec.4, T.35 N., R.16 W., Montezuma County, Hydrologic Unit 14080202, on left bank 600 ft (180 m) upstream from mouth, 0.30 mi (0.5 km) upstream from McElmo Fall, and 1.2 mi (1.9 km) southwest of Cortez.

DRAINAGE AREA.--34.0 mi² (88.1 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,900 ft (1,798 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 164 ft³/s (4.64 m³/s) Mar. 16, 1979, gage height, 4.44 ft (1.353 m); minimum daily, 0.70 ft³/s (0.020 m³/s) Oct. 11, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 157 ft³/s (4.45 m³/s) Feb. 20, gage height, 4.35 ft (1.326 m); minimum daily, 0.70 ft³/s (0.020 m³/s) Oct. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	5.5	7.0	6.5	11	17	14	11	10	16	11	20
2	2.8	5.5	8.0	5.6	11	16	16	11	14	17	9.4	20
3	2.8	5.5	8.5	6.5	12	18	17	10	11	18	6.8	20
4	2.3	6.0	8.2	7.0	13	25	16	9.0	11	18	6.6	22
5	1.8	6.5	9.0	6.0	14	23	31	9.4	15	16	6.6	28
6	1.1	7.5	8.2	6.0	12	20	33	9.9	13	14	5.7	32
7	1.1	8.0	8.7	5.5	12	26	38	12	16	15	5.7	34
8	1.5	10	8.4	5.5	13	23	25	20	17	16	7.5	30
9	1.3	12	8.2	5.7	11	20	27	15	17	15	8.7	38
10	.78	9.9	9.0	12	9.5	17	30	14	18	16	9.6	55
11	.70	8.9	9.0	12	9.0	16	30	20	16	18	7.2	60
12	.78	9.0	7.5	12	8.5	21	23	19	17	19	6.4	35
13	2.2	8.9	6.5	19	8.0	19	22	16	17	22	7.8	32
14	6.3	8.5	7.0	30	36	18	22	14	16	24	9.7	30
15	7.8	8.5	7.5	29	50	16	22	16	17	24	13	27
16	8.2	8.9	7.5	17	40	16	20	19	18	22	13	24
17	8.2	10	7.0	15	30	15	18	16	21	18	12	22
18	8.4	12	6.5	16	70	15	18	14	22	14	12	22
19	8.5	13	6.5	15	80	15	21	12	20	13	11	20
20	8.9	15	7.0	14	100	15	27	12	19	12	10	18
21	18	13	8.0	12	50	14	28	11	18	10	11	17
22	8.9	10	9.0	11	55	14	30	14	18	9.0	11	16
23	6.6	8.5	8.0	10	44	15	30	14	17	9.6	13	16
24	5.9	9.5	10	12	30	15	32	10	17	9.9	32	16
25	5.7	9.7	9.0	12	22	17	24	7.7	15	10	39	17
26	5.7	10	10	11	21	18	18	7.7	16	13	40	16
27	6.0	11	12	10	22	17	18	8.4	15	12	28	16
28	6.0	8.0	10	11	21	17	17	5.9	13	10	24	16
29	5.5	8.5	9.0	11	19	18	17	5.7	13	9.9	24	15
30	6.0	8.7	8.0	13	---	19	21	7.7	15	10	24	14
31	6.5	---	7.5	11	---	16	---	9.4	---	10	24	---
TOTAL	159.06	276.0	255.7	369.3	834.0	551	705	380.8	482	460.4	449.7	748
MEAN	5.13	9.20	8.25	11.9	28.8	17.8	23.5	12.3	16.1	14.9	14.5	24.9
MAX	18	15	12	30	100	26	38	20	22	24	40	60
MIN	.70	5.5	6.5	5.5	8.0	14	14	5.7	10	9.0	5.7	14
AC-FT	315	547	507	733	1650	1090	1400	755	956	913	892	1480

CAL YR 1979 TOTAL 4598.56 MEAN 12.6 MAX 80 MIN .70 AC-FT 9120
WTR YR 1980 TOTAL 5670.96 MEAN 15.5 MAX 100 MIN .70 AC-FT 11250

09371400 HARTMAN DRAW AT CORTEZ, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1978 to current year.
WATER TEMPERATURES: April 1978 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,640 micromhos Jan. 8, 1980; minimum, 1,360 micromhos June 6, 1979, Aug. 1, 1980.
WATER TEMPERATURES: Maximum, 27.5°C June 26, 1979; minimum, freezing point on many days during winter period each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 3,640 micromhos Jan. 8; minimum, 1,360 micromhos Aug. 1.
WATER TEMPERATURES: Maximum, 25.5°C July 22, Aug. 1, 3, 7, 12; minimum, 0.0°C on many days during November to February.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3090	2760	2940	3500	3280	3100	3210	2560	1890	1670	1580	2060
2	3150	2890	2900	3560	3280	3130	3100	2730	1870	1660	1620	2060
3	3110	2980	2920	3540	3270	3150	3090	2830	1850	1660	1750	2060
4	2760	3010	2920	3540	3260	3240	2970	2880	1900	1680	1840	2070
5	2660	3010	2870	3560	3180	3330	2730	2900	1860	1680	1850	2080
6	2840	3070	2960	3530	3360	3330	2680	3020	1780	1750	1910	2070
7	2840	3100	2930	3530	3430	3120	2500	2870	1590	1760	1970	2070
8	2800	3040	2970	3520	3440	2970	2670	2780	1580	1770	1960	2080
9	2940	3210	3000	3440	3470	2930	2580	2650	1580	1810	1980	2090
10	3040	3130	3030	3070	3290	2980	2520	2500	1540	1830	2000	2110
11	3140	3100	3060	3340	3170	2920	2420	2410	1550	1830	2060	2120
12	3140	2990	3120	3370	3100	2900	2510	2480	1540	1790	2130	2160
13	3100	2960	3180	3220	3130	3000	2680	2380	1540	1760	2170	2220
14	3080	2990	3180	3070	2980	2990	2550	2350	1560	1790	2200	2240
15	3040	2990	3140	3000	3050	2980	2310	2320	1600	1800	2250	2260
16	3000	2970	3150	3120	3200	2920	2310	2350	1600	1820	2310	2260
17	2930	2810	3170	3210	3320	2930	2350	2400	1600	1790	2340	2270
18	2860	2720	3240	3260	3360	2920	2380	2420	1590	1730	2350	2290
19	2780	2680	3280	3200	2380	2920	2420	2400	1590	1730	2410	2300
20	2750	2590	3270	3210	2360	2940	2070	2390	1610	1750	2390	2310
21	3180	2620	3250	3270	2340	2960	1910	2370	1640	1770	2230	2320
22	3010	2820	3230	3260	2540	2980	1910	2290	1690	1820	2130	2340
23	2910	2920	3270	3300	2540	2980	1990	2220	1720	1880	2120	2380
24	2910	2950	3250	3260	2800	3020	1950	2160	1740	1920	2090	2420
25	2910	2930	3240	3250	2980	3030	2050	2150	1670	1950	2020	2430
26	2900	2980	3250	3270	3000	3130	2350	2170	1630	1970	2040	2410
27	2820	3050	3240	3270	2990	3110	2470	2180	1620	1970	2040	2420
28	2800	3020	3320	3250	3010	3070	2530	2210	1660	2020	2050	2420
29	2640	3000	3350	3200	3080	3140	2570	2200	1690	1910	2050	2430
30	2710	2970	3380	3160	---	3200	2500	1990	1690	1730	2050	2450
31	2810	---	3370	3240	---	3200	---	1890	---	1650	2060	---

09371400 HARTMAN DRAW AT CORTEZ, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.0	.0	5.5	1.5	---	---	---	.0	3.0	1.0	10.5	4.5
2	13.5	5.5	5.5	1.5	---	---	---	.0	4.5	1.0	10.5	5.5
3	16.0	1.0	6.5	2.0	---	---	---	.0	5.0	1.0	8.0	6.5
4	12.5	.0	7.0	4.5	---	---	.5	.5	5.0	2.0	8.0	6.0
5	15.5	.0	7.0	2.5	---	---	.5	.5	4.0	.0	9.0	4.5
6	15.0	4.5	6.5	2.5	---	---	.5	.5	4.0	.0	8.5	5.5
7	15.0	2.0	8.0	6.5	1.0	.0	.5	.5	5.5	2.5	7.0	5.0
8	14.0	7.5	7.5	6.5	2.5	.0	2.5	.5	4.0	1.0	9.0	4.5
9	15.0	8.0	8.5	5.5	2.5	.0	4.0	2.5	4.5	.0	10.5	4.0
10	18.0	3.0	7.0	4.0	2.0	.0	2.5	1.0	3.0	.5	11.0	4.5
11	16.0	2.5	5.5	2.0	3.0	.5	3.0	1.5	3.0	.5	8.5	6.5
12	19.5	2.5	5.0	1.0	2.0	.0	3.5	2.5	4.0	.5	9.5	4.5
13	13.0	1.0	4.5	.5	.0	.0	3.5	2.5	6.0	.5	10.5	3.0
14	11.5	8.0	5.0	.5	.0	.0	3.5	2.0	5.5	3.0	11.5	4.5
15	13.0	6.5	5.0	.5	.5	.0	4.5	2.0	5.0	2.5	11.0	5.5
16	13.0	6.5	5.0	.5	.5	.0	4.5	1.5	7.5	3.5	9.0	5.0
17	11.5	6.5	4.5	.5	.5	.0	4.5	1.5	6.5	4.0	9.0	1.5
18	13.0	8.5	5.5	4.0	.5	.0	5.0	3.0	7.5	5.0	10.5	3.0
19	14.5	9.0	5.0	3.0	.5	.0	3.5	1.5	7.0	4.0	8.5	6.0
20	12.0	9.0	3.5	2.5	.0	.0	4.5	1.0	6.5	3.0	12.0	4.0
21	9.0	7.0	2.5	.5	.0	.0	2.0	.5	6.0	4.0	12.0	5.0
22	8.5	4.0	.5	.0	---	.0	2.5	.5	8.5	3.0	8.0	6.0
23	10.0	5.0	.0	.0	---	.0	1.0	.5	7.5	3.5	9.0	4.0
24	11.0	6.0	.0	.0	---	.0	1.0	.5	8.0	2.5	7.5	4.0
25	11.5	6.0	2.5	.0	---	.0	1.0	.5	9.0	3.0	7.0	4.5
26	11.5	6.5	4.0	.5	---	.0	4.0	.5	9.5	3.5	8.5	1.5
27	10.5	6.0	3.5	.0	---	.0	5.5	1.5	10.0	4.0	10.0	4.5
28	9.5	5.0	.0	.0	---	.0	3.5	2.5	10.0	4.5	6.5	3.5
29	7.5	4.5	.0	.0	---	.0	3.5	1.0	10.5	6.0	9.5	1.0
30	7.0	3.5	.0	.0	---	.0	6.0	2.5	---	---	8.5	2.0
31	6.0	2.0	---	---	---	.0	2.5	1.0	---	---	6.5	2.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.0	.5	13.5	9.0	16.5	7.5	23.0	18.0	25.5	17.0	15.0	12.5
2	6.5	2.0	15.0	7.0	17.5	7.5	22.5	18.0	24.0	18.5	15.5	12.0
3	9.5	1.5	16.0	8.5	19.0	9.0	24.0	16.5	25.5	17.5	15.0	12.5
4	12.0	3.0	18.0	8.5	19.5	9.5	23.5	16.0	24.0	17.5	15.0	11.5
5	12.0	5.5	15.5	10.0	20.0	10.5	23.5	15.0	23.5	17.0	15.0	13.0
6	13.0	7.0	17.5	9.0	17.5	11.5	22.0	15.0	24.5	17.5	15.0	13.5
7	10.5	6.5	16.5	11.0	18.0	9.0	21.0	17.5	25.5	17.0	15.0	14.0
8	11.0	3.5	16.0	9.5	19.5	12.0	23.0	16.0	22.0	18.0	15.0	14.0
9	11.5	4.5	13.0	9.5	21.5	12.0	24.0	16.5	24.5	17.0	14.5	13.5
10	12.5	6.0	10.5	8.0	21.5	12.5	21.5	17.0	24.5	16.5	13.5	13.0
11	11.0	6.5	10.5	8.5	21.0	12.5	25.0	16.5	24.5	15.5	13.0	12.0
12	9.0	4.5	12.0	6.0	20.5	12.0	23.0	18.0	25.5	17.5	16.0	12.0
13	12.0	4.0	16.5	6.0	20.5	12.0	21.0	18.5	24.0	18.0	16.0	13.5
14	13.0	4.0	13.0	9.0	20.0	11.5	23.0	16.0	21.0	18.5	16.0	13.5
15	15.0	5.5	12.0	8.0	20.0	10.5	23.5	15.5	21.0	17.0	16.0	13.5
16	15.5	6.0	17.0	7.5	21.0	12.5	22.5	15.0	23.0	16.0	16.0	14.0
17	16.0	5.5	18.5	10.5	21.5	12.5	23.0	15.0	22.5	14.5	15.5	12.0
18	16.5	6.5	19.0	8.5	22.0	13.5	23.5	15.5	21.0	14.5	15.0	11.5
19	17.0	7.0	20.5	10.0	22.0	15.0	24.0	18.0	22.0	15.0	15.5	13.0
20	16.5	9.0	21.0	11.0	21.0	13.0	24.5	17.0	19.5	13.0	15.0	12.5
21	14.0	11.0	21.5	11.5	21.5	15.0	25.0	16.5	19.5	10.0	14.5	11.5
22	14.5	9.0	20.5	13.5	22.5	14.5	25.5	17.5	20.0	11.5	13.5	10.0
23	13.0	9.0	20.0	11.0	22.0	14.5	25.0	17.5	17.5	15.0	12.5	10.0
24	9.5	7.5	14.5	9.5	22.5	14.5	24.0	18.0	16.5	15.0	12.5	9.0
25	14.0	6.5	15.5	5.5	23.0	14.5	24.0	18.5	17.0	14.0	12.0	9.0
26	16.0	7.5	14.5	6.5	23.5	16.5	23.0	17.5	17.5	14.5	12.0	10.0
27	17.0	8.0	16.0	7.5	23.5	16.0	23.5	17.0	17.0	14.0	13.0	10.5
28	18.5	8.5	18.5	8.0	22.5	15.5	25.0	16.0	17.0	14.5	12.5	10.5
29	15.5	11.0	17.5	8.5	24.5	16.0	23.0	17.5	16.5	14.5	12.5	10.0
30	14.5	9.0	17.0	7.5	24.0	18.5	23.0	17.5	16.0	14.0	12.0	9.5
31	---	---	17.5	7.5	---	---	24.5	16.5	15.5	12.5	---	---

09371420 McELMO CREEK ABOVE ALKALI CANYON, NEAR CORTEZ, CO

LOCATION.--Lat 37°19'38", long 108°38'55", in SE¼SE¼ sec.31, T.36 N., R.16 W., Montezuma County, Hydrologic Unit 14080202, on left bank 0.9 mi (1.4 km) upstream from Alkali Canyon and 4.0 mi (6.4 km) southwest of Cortez.

DRAINAGE AREA.--147 mi² (381 km²).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,750 ft (1,753 m), from topographic map.

REMARKS.--Records good. Diversions from tributaries above station for irrigation. Low flows are mainly return flow from irrigated areas. Water is imported above station from Dolores River basin for irrigation of about 33,000 acres (134 km²) above and below station in Montezuma Irrigation District and for municipal use by city of Cortez. A small amount of water is diverted at times to Mancos River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--8 years, 25.7 ft³/s (0.728 m³/s), 18,620 acre-ft/yr (23.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 816 ft³/s (23.1 m³/s) July 31, 1976, gage height, 5.92 ft (1.804 m), from rating curve extended above 190 ft³/s (5.4 m³/s), on basis of step-backwater method; minimum daily, 1.5 ft³/s (0.042 m³/s) Sept. 21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 428 ft³/s (12.1 m³/s) Feb. 18, gage height, 4.47 ft (1.362 m), from rating curve extended above 190 ft³/s (5.4 m³/s), on basis of step-backwater method; minimum daily, 8.2 ft³/s (0.23 m³/s) Dec. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	24	8.2	17	18	50	46	18	30	34	19	32
2	9.3	20	9.5	12	20	48	45	24	36	38	14	32
3	10	17	8.9	12	22	50	54	31	32	37	13	32
4	9.6	16	9.3	10	26	60	67	20	30	34	13	33
5	9.6	16	10	13	26	65	72	28	31	33	11	34
6	9.6	14	9.3	15	24	55	93	33	32	30	10	50
7	9.3	14	10	14	22	60	116	34	35	33	10	54
8	9.6	17	10	12	22	60	67	56	38	40	12	39
9	9.3	22	11	12	19	55	66	51	33	36	16	40
10	8.9	16	12	88	18	46	83	43	35	36	16	78
11	8.9	14	11	79	18	48	105	52	35	39	12	97
12	8.9	14	9.3	49	18	64	77	63	36	39	11	63
13	9.6	13	9.3	60	16	58	63	58	38	44	14	54
14	11	15	10	87	57	52	55	54	38	49	17	51
15	12	14	8.5	79	108	53	68	53	38	44	26	47
16	16	13	10	42	83	59	64	86	39	39	24	43
17	18	14	10	32	60	48	58	80	40	34	20	35
18	18	11	9.0	35	151	44	50	80	40	30	21	32
19	18	16	9.0	37	169	44	43	64	40	27	20	30
20	21	20	11	33	200	45	51	50	40	26	18	29
21	62	19	13	29	98	49	47	46	40	21	20	26
22	23	18	12	26	117	63	48	48	38	17	19	24
23	22	27	14	22	79	55	47	49	36	16	19	18
24	18	22	15	15	50	51	46	47	34	16	39	15
25	15	18	17	16	43	52	43	40	32	16	50	14
26	14	18	18	17	44	58	34	28	30	20	45	14
27	15	17	17	18	48	60	31	15	28	22	42	14
28	16	20	16	19	55	51	28	13	22	18	37	14
29	24	20	15	22	55	51	28	14	24	16	37	14
30	31	14	15	28	---	66	30	20	28	18	37	13
31	30	---	14	26	---	51	---	27	---	19	38	---
TOTAL	505.9	513	360.3	976	1686	1671	1725	1325	1028	921	700	1071
MEAN	16.3	17.1	11.6	31.5	58.1	53.9	57.5	42.7	34.3	29.7	22.6	35.7
MAX	62	27	18	88	200	66	116	86	40	49	50	97
MIN	8.9	11	8.2	10	16	44	28	13	22	16	10	13
AC-FT	1000	1020	715	1940	3340	3310	3420	2630	2040	1830	1390	2120

CAL YR 1979 TOTAL 12647.6 MEAN 34.7 MAX 302 MIN 8.2 AC-FT 25090
WTR YR 1980 TOTAL 12482.2 MEAN 34.1 MAX 200 MIN 8.2 AC-FT 24760

09371495 MUD CREEK NEAR CORTEZ, CO

LOCATION.--Lat 37°19'10", long 108°40'03", in SE¼NE¼ sec.1, T.35 N., R.17 W., Montezuma County, Hydrologic Unit 14080202, on right bank 0.4 mi (0.6 km) upstream from mouth, and 4 mi (6.4 km) southwest of Cortez.

DRAINAGE AREA.--33.6 mi² (87.0 km²).

PERIOD OF RECORD.--April 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,740 ft (1,750 m), from topographic map.

REMARKS.--Records good except those for winter periods which are fair. Several small diversions above station for irrigation of hay meadows above and below gage. Most of flow is return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 277 ft³/s (7.84 m³/s) May 27, 1979, gage height, 5.26 ft (1.603 m); maximum gage height, 7.40 ft (2.256 m) Jan. 18, 1979, backwater from ice; minimum daily discharge, 0.44 ft³/s (0.012 m³/s) July 8, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 164 ft³/s (4.64 m³/s) Feb. 20, gage height, 6.76 ft (2.060 m); minimum daily, 0.77 ft³/s (0.022 m³/s) Oct. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	1.4	3.1	2.7	3.0	3.0	2.7	7.9	10	11	9.6	7.3
2	1.2	1.4	3.0	2.6	3.0	2.9	3.3	8.0	13	9.0	9.0	8.0
3	1.2	2.2	3.0	2.4	3.0	3.4	3.9	8.4	15	14	6.3	9.0
4	1.1	2.9	3.0	2.2	3.2	4.2	4.2	7.6	14	12	6.0	5.5
5	1.1	2.6	3.1	2.2	3.2	3.9	4.0	4.8	14	14	3.3	6.4
6	1.1	2.7	2.9	2.7	3.1	3.6	4.1	4.1	10	12	4.6	9.6
7	1.2	2.9	2.9	2.9	3.2	4.2	4.6	4.1	2.9	10	4.0	17
8	1.2	3.1	3.0	2.9	3.1	3.8	3.1	3.4	2.9	13	3.9	10
9	1.1	3.2	3.1	2.9	2.7	3.2	3.2	2.5	3.2	11	3.3	8.8
10	1.1	3.1	3.2	43	2.6	2.9	3.8	2.1	11	11	3.2	30
11	1.2	2.8	3.2	31	2.6	5.0	3.8	3.4	12	12	3.2	50
12	1.0	2.9	3.2	9.1	2.5	6.1	2.9	3.6	13	13	3.1	14
13	1.0	3.1	3.2	13	2.9	4.2	2.7	3.2	12	14	4.0	9.2
14	1.0	3.2	3.0	14	8.5	3.4	2.7	3.2	12	16	4.7	2.7
15	.98	3.2	3.0	12	35	3.3	2.8	3.6	9.6	14	12	4.1
16	.94	3.4	3.0	4.0	9.4	3.8	2.7	4.8	11	14	10	6.1
17	1.0	3.4	2.8	3.1	7.1	3.0	3.0	2.8	11	12	10	5.6
18	1.0	3.6	2.8	2.8	20	3.1	3.4	2.7	12	12	10	4.3
19	1.1	3.6	2.8	3.0	63	2.9	3.7	2.4	11	11	8.7	4.9
20	.94	4.0	2.8	3.2	98	2.9	3.8	2.2	10	11	9.4	3.3
21	1.1	3.4	3.0	2.8	39	3.0	4.8	1.6	10	9.6	10	1.6
22	.77	2.9	2.8	2.8	55	3.3	9.8	1.8	11	8.2	12	3.7
23	.80	3.1	2.8	3.0	29	3.1	8.8	2.1	11	8.7	11	3.6
24	.84	3.2	2.8	3.0	13	3.1	8.0	3.0	12	8.8	19	3.6
25	.88	3.1	2.6	3.4	8.2	3.7	9.8	6.4	9.6	7.8	29	4.0
26	.88	3.2	2.6	3.0	7.6	3.5	7.6	8.4	4.7	1.5	29	4.1
27	.91	3.2	2.6	2.8	6.8	2.9	7.7	9.0	1.0	3.4	24	4.4
28	.94	2.6	2.6	2.8	5.5	2.9	7.3	7.4	2.5	6.8	19	4.4
29	1.2	2.7	2.6	3.0	4.6	3.2	6.4	5.4	5.5	5.4	16	5.6
30	1.5	2.6	2.6	3.2	---	3.1	7.1	6.7	5.9	5.0	12	5.9
31	1.4	---	2.6	3.0	---	3.1	---	9.0	---	6.9	7.3	---
TOTAL	32.79	88.7	89.7	196.5	447.8	107.5	145.5	145.6	282.8	318.1	316.6	255.7
MEAN	1.06	2.96	2.89	6.27	15.4	3.47	4.85	4.70	9.43	10.3	10.2	8.52
MAX	1.5	4.0	3.2	43	98	6.1	9.8	9.0	15	16	29	50
MIN	.77	1.4	2.6	2.2	2.5	2.8	2.7	1.6	1.0	1.5	3.1	1.6
AC-FT	65	176	178	386	888	213	289	289	561	631	628	507

CAL YR 1979	TOTAL 1867.12	MEAN 5.12	MAX 154	MIN .44	AC-FT 3700
WTR YR 1980	TOTAL 2425.28	MEAN 6.63	MAX 98	MIN .77	AC-FT 4810

BEST DOCUMENT AVAILABLE

09371700 McELMO CREEK BELOW CORTEZ, CO

LOCATION.--Lat 37°20'26", long 108°48'19", in NW¼NW¼ sec.35, T.36 N., R.18 W., Montezuma County, Hydrologic Unit 14080202, on left bank 100 ft (30 m) downstream from bridge on State Highway 32, 150 ft (46 m) downstream from Sand Canyon, and 11.7 mi (18.8 km) west of Cortez.

DRAINAGE AREA.--283 mi² (733 km²).

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,430 ft (1,655 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station by Black Dike ditch for irrigation of 310 acres (1.25 km²) above station and Rock Creek ditch for irrigation of 650 acres (2.63 km²) below station. Low flows are mainly return flows from irrigated areas. Water is imported above station from Dolores River basin for irrigation of about 33,000 acres (134 km²) above and below station in Montezuma Irrigation District and for municipal use by city of Cortez. A small amount of water is diverted at times to Mancos River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.-- 8 years, 39.4 ft³/s (1.116 m³/s), 28,540 acre-ft/yr (35.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,130 ft³/s (60.3 m³/s) July 19, 1977, gage height, 8.96 ft (2.731 m), from floodmarks, from rating curve extended above 400 ft³/s (11 m³/s), on basis of step-backwater method; minimum daily, 0.04 ft³/s (0.001 m³/s) Sept. 9, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 566 ft³/s (16.0 m³/s) at 0730 Feb. 19, gage height, 5.31 ft (1.618 m); minimum daily, 5.4 ft³/s (0.15 m³/s) Oct. 2-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	39	24	22	34	91	96	28	35	33	23	60
2	5.4	35	26	24	36	83	94	35	46	37	22	56
3	5.4	33	30	20	38	91	115	44	44	35	22	54
4	5.4	33	26	22	42	112	139	30	39	35	44	53
5	5.6	33	28	18	44	120	144	32	42	30	23	57
6	5.8	31	28	20	42	96	157	36	40	27	22	90
7	6.6	31	26	22	41	115	176	33	39	30	22	173
8	7.8	33	26	26	42	105	121	58	42	41	22	128
9	7.8	39	26	28	37	100	118	55	42	41	26	139
10	7.6	35	26	59	33	86	130	46	44	41	26	169
11	7.1	32	28	72	31	94	144	50	42	49	23	233
12	6.8	31	24	42	32	116	116	62	42	50	23	153
13	6.8	30	19	73	35	104	99	50	44	68	36	133
14	6.8	30	20	104	41	99	78	39	44	74	33	107
15	6.8	31	22	153	44	99	89	58	44	64	51	84
16	6.6	30	22	84	39	107	86	72	48	55	51	78
17	6.4	27	22	58	27	92	80	61	51	50	47	72
18	6.4	13	20	54	248	88	65	57	48	41	49	72
19	6.4	28	20	60	384	91	42	48	47	42	46	69
20	22	39	20	51	384	91	46	35	50	42	44	64
21	115	40	24	44	257	97	44	32	44	40	44	60
22	44	32	28	41	216	116	52	32	45	33	48	48
23	42	26	24	32	206	102	50	32	46	30	50	42
24	43	33	30	33	121	99	47	31	44	28	91	39
25	42	37	28	34	94	96	50	30	42	28	110	37
26	42	36	32	36	91	102	40	35	37	23	89	37
27	43	35	35	36	92	105	37	25	32	27	80	37
28	42	24	35	37	99	100	37	23	23	26	73	37
29	36	25	26	38	100	96	37	23	27	22	70	36
30	42	26	24	49	---	126	33	25	32	24	70	34
31	42	---	22	46	---	104	---	29	---	25	64	---
TOTAL	678.1	947	791	1438	2930	3123	2562	1246	1245	1191	1444	2451
MEAN	21.9	31.6	25.5	46.4	101	101	85.4	40.2	41.5	38.4	46.6	81.7
MAX	115	40	35	153	384	126	176	72	51	74	110	233
MIN	5.4	13	19	18	27	83	33	23	23	22	22	34
AC-FT	1350	1880	1570	2850	5810	6190	5080	2470	2470	2360	2860	4860

CAL YR 1979 TOTAL 20405.7 MEAN 55.9 MAX 380 MIN 5.0 AC-FT 40470
WTR YR 1980 TOTAL 20046.1 MEAN 54.8 MAX 384 MIN 5.4 AC-FT 39760

09372000 McELMO CREEK NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 37°19'27", long 109°00'54", in NE¼ sec.2, T.35 N., R.20 W., Montezuma County, Hydrologic Unit 14080202, on right bank 1.5 mi (2.4 km) upstream from Colorado-Utah State line, 2.0 mi (3.2 km) upstream from Yellowjacket Creek, and 2.0 mi (3.2 km) west of former town of McElmo.

DRAINAGE AREA.--346 mi² (896 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1951 to current year.

REVISED RECORDS.--WSP 1925: 1951-52(M), 1957(M). WRD Colo. 1972: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,890 ft (1,490 m), from topographic map.

REMARKS.--Records good. Diversions for irrigation of about 1,780 acres (7.20 km²) above station. One diversion above station for irrigation of about 60 acres (243,000 m²) below. Part of flow is return water from irrigated lands of Montezuma Irrigation District (water imported from Dolores River basin).

AVERAGE DISCHARGE.--29 years, 45.9 ft³/s (1.300 m³/s), 33,250 acre-ft/yr (41.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,040 ft³/s (86.1 m³/s) Aug. 7, 1967, gage height, 7.58 ft (2.310 m), from floodmark in gage well, from rating curve extended above 2,100 ft³/s (59 m³/s); maximum gage height, 8.13 ft (2.478 m) Sept. 6, 1970; minimum daily discharge, 0.08 ft³/s (0.002 m³/s) Sept. 9, 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 706 ft³/s (20.0 m³/s) at 0330 Feb. 20, gage height, 5.53 ft (1.686 m), only peak above base of 620 ft³/s (18 m³/s); minimum daily, 12 ft³/s (0.34 m³/s) Aug. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	37	27	23	40	131	89	49	42	40	40	81
2	20	33	28	29	42	124	91	39	50	52	36	60
3	20	30	35	21	47	119	106	50	53	49	36	52
4	22	29	29	24	47	126	134	42	44	53	42	50
5	20	29	30	19	52	138	140	33	50	52	26	60
6	23	29	30	21	49	136	150	35	58	46	18	104
7	21	28	29	23	47	129	174	37	60	44	16	141
8	20	32	29	27	49	128	124	64	52	59	12	126
9	20	39	29	29	42	119	111	71	54	68	17	141
10	18	34	28	76	34	109	121	56	68	67	22	195
11	18	29	33	99	33	107	146	56	64	79	19	242
12	18	28	29	53	32	138	126	87	70	79	15	172
13	19	28	20	78	37	126	104	76	76	95	34	157
14	20	29	23	107	50	116	89	58	73	106	33	129
15	24	32	25	191	189	116	94	73	71	87	59	131
16	23	28	24	119	174	128	99	86	81	73	68	122
17	22	32	24	73	148	109	91	83	89	67	60	114
18	23	29	22	64	166	100	79	78	87	53	64	97
19	22	43	22	100	490	102	73	71	73	47	58	89
20	33	44	22	78	524	102	81	52	68	54	54	81
21	129	47	28	59	413	106	84	43	59	46	50	73
22	50	29	30	56	288	128	92	36	58	33	56	64
23	36	26	27	47	258	121	87	43	58	32	53	52
24	44	35	35	32	172	111	89	44	50	32	92	42
25	39	43	29	36	136	106	84	37	49	32	122	36
26	40	42	34	36	126	117	67	44	39	28	94	35
27	43	42	42	39	128	121	59	35	29	42	89	35
28	43	27	40	37	131	114	56	29	21	46	83	35
29	36	27	27	62	131	104	52	28	37	42	76	35
30	42	28	26	54	---	119	56	28	36	40	75	34
31	43	---	24	59	---	102	---	30	---	37	73	---
TOTAL	975	988	880	1771	4075	3652	2948	1593	1719	1680	1592	2785
MEAN	31.5	32.9	28.4	57.1	141	118	98.3	51.4	57.3	54.2	51.4	92.8
MAX	129	47	42	191	524	138	174	87	89	106	122	242
MIN	18	26	20	19	32	100	52	28	21	28	12	34
AC-FT	1930	1960	1750	3510	8080	7240	5850	3160	3410	3330	3160	5520

CAL YR 1979 TOTAL 25480.4 MEAN 69.8 MAX 633 MIN 6.0 AC-FT 50540
WTR YR 1980 TOTAL 24658.0 MEAN 67.4 MAX 524 MIN 12 AC-FT 48910

09372000 Mc ELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	PH (UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT											
31...	0940	48	3000	7.8	5.0	--	10.5	37	263	800	1600
NOV											
26...	1230	34	3520	7.5	4.0	--	11.0	--	K4	68	1800
DEC											
31...	1045	20	3300	8.0	.0	--	11.9	31	K9	90	1900
FEB											
05...	0900	54	3720	8.1	4.0	--	10.7	36	58	K48	1800
MAR											
10...	1540	110	3600	8.0	10.5	--	9.0	52	K32	< 2	1800
APR											
14...	1500	86	2600	7.8	11.0	190	9.0	46	31	K40	1400
MAY											
12...	0945	93	2890	8.1	9.0	--	9.5	66	> 160	> 160	1500
JUN											
09...	0910	52	2200	7.7	16.0	130	8.1	48	550	640	1100
30...	1215	34	2600	8.0	25.0	--	6.8	27	K430	K535	1300
JUL											
28...	0900	50	2050	7.7	18.0	--	7.8	29	K470	K580	1100
SEP											
08...	0915	118	1750	8.1	18.0	--	7.8	60	840	K2100	950

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT											
31...	1400	330	200	210	2.3	7.3	280	1700	55	.4	12
NOV											
26...	1500	360	220	260	2.7	7.4	300	1900	63	.5	12
DEC											
31...	1600	373	240	260	2.9	6.6	310	2000	65	.4	12
FEB											
05...	1500	300	260	270	2.8	6.5	310	1900	62	.4	14
MAR											
10...	1600	340	240	210	2.1	6.1	270	1700	60	.4	16
APR											
14...	1200	275	170	190	2.5	5.2	240	1400	50	.3	9.3
MAY											
12...	1300	300	180	180	2.0	6.4	240	1500	49	.2	2.5
JUN											
09...	850	220	130	140	2.1	5.5	240	1000	39	.4	3.9
30...	1000	260	150	150	1.8	6.6	270	1200	37	.4	11
JUL											
28...	860	230	130	140	1.8	5.7	250	1100	40	.5	6.8
SEP											
08...	710	200	110	110	1.6	7.2	240	880	39	.5	12

K BASED ON NON-IDEAL COLONY COUNT.

09372000 Mc ELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT											
31...	2880	2680	3.9	373	1.9	.040	1.5	1.50	3.4	.290	.070
NOV											
26...	3270	3000	4.4	304	3.7	.070	.93	1.00	4.7	.180	.030
DEC											
31...	3[illegible]90	3160	4.7	188	3.3	.030	.97	1.00	4.3	.160	.050
FEB											
05...	3580	3000	4.8	525	1.5	1.30	--	--	--	.350	.070
MAR											
10...	2910	2740	3.9	864	2.6	.130	1.3	1.40	4.0	.310	.040
APR											
14...	2110	2250	2.8	490	2.0	.060	.92	.98	3.0	.510	.030
MAY											
12...	2590	2360	3.5	650	2.7	.040	4.6	4.60	7.3	.770	.050
JUN											
09...	1880	1680	2.5	264	1.0	.060	1.7	1.80	2.8	.410	.060
30...	2080	1980	2.8	191	.36	.000	.94	.94	1.3	.070	.060
JUL											
28...	1960	1800	2.6	265	.35	.070	2.4	2.50	2.9	.100	.020
SEP											
08...	1730	1500	2.3	551	.97	.070	1.9	2.00	3.0	.770	.050

DATE	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	PHYTO-PLANK-TON, TOTAL (CELLS PER ML)	PERI-PHYTON BIOMASS ASH WEIGHT G/SQ M	PERI-PHYTON BIOMASS TOTAL DRY WEIGHT G/SQ M	BIOMASS CHLORO-PHYLL RATIO PERI-PHYTON (UNITS)	CHLOR-A PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)	CHLOR-B PERI-PHYTON CHROMO-GRAPHIC FLUOROM (MG/M2)
OCT										
31...	200	30	13	.4	4800	--	--	--	--	--
NOV										
26...	210	10	17	.1	2600	--	--	--	--	--
DEC										
31...	200	30	18	.6	1300	.080	.080	.00	.170	.000
FEB										
05...	230	30	22	1.1	330	--	--	--	--	--
MAR										
10...	170	20	13	.6	120	--	--	--	--	--
APR										
14...	150	83	13	.8	140	--	--	--	--	--
MAY										
12...	180	50	12	.6	550	.157	.157	.00	.050	.000
JUN										
09...	150	< 10	10	.6	11000	--	--	--	--	--
30...	240	40	23	--	2000	--	--	--	--	--
JUL										
28...	240	80	12	1.3	1700	8.82	10.0	1026	1.15	.200
SEP										
08...	180	10	11	.1	930	--	--	--	--	--

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT-TOM MA-TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS BA)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	BERYL-LIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)
DEC											
31...	1045	10	--	1	--	--	40	--	--	< 1	--
APR											
14...	1500	20	--	0	4	--	30	40	--	< 3	1
JUN											
09...	0910	30	3	1	6	200	20	100	0	< 1	2

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COBALT, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)
DEC											
31...	--	< 1	--	--	0	--	--	4	--	< 10	--
APR											
14...	--	< 3	1	--	10	3	--	< 8	10	< 25	14
JUN											
09...	1	< 1	1	0	0	3	5	< 3	10	< 10	10

09372000 Mc ELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

DATE	LEAD. TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD. DIS-SOLVED (UG/L AS PB)	LEAD. RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE. TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE. DIS-SOLVED (UG/L AS MN)	MANGA-NESE. RECOV. FM BOT-TOM MA-TERIAL (UG/G)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)
DEC											
31...	--	0	--	--	170	--	280	--	--	.0	--
APR											
14...	--	< 25	20	--	120	--	63	190	--	.0	.03
JUN											
09...	11	< 10	10	90	37	410	13	210	.2	.0	.02

DATE	MOLYB-DENUM. TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	MOLYB-DENUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	NICKEL. TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL. DIS-SOLVED (UG/L AS NI)	NICKEL. RECOV. FM BOT-TOM MA-TERIAL (UG/G AS NI)	SELE-NIUM. TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SELE-NIUM, TOTAL IN BOT-TOM MA-TERIAL (UG/G)	STRON-TIUM. DIS-SOLVED (UG/L AS SR)	VANA-DIUM. DIS-SOLVED (UG/L AS V)
DEC											
31...	--	14	--	--	3	--	--	9	--	5100	< 6.0
APR											
14...	--	< 25	17	--	4	10	--	12	1	3500	14
JUN											
09...	0	< 10	8	14	4	20	4	4	1	1200	< 3.0

DATE	ZINC. TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC. DIS-SOLVED (UG/L AS ZN)	ZINC. RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	GROSS ALPHA. DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA. SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA. DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA. SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA. DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA. SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA. DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA. SUSP. TOTAL (PCI/L AS SR/YT-90)
DEC											
31...	--	25	--	--	--	--	--	--	--	--	--
APR											
14...	--	8	35	--	--	--	--	--	--	--	--
JUN											
09...	60	3	25	< 18	18	< 26	26	< 11	18	< 11	17

DATE	TIME	STREAM-FLOW. INSTAN-TANEOUS (CFS)	SEDI-MENT. SUS-PENDED (MG/L)	SEDI-MENT. DIS-CHARGE. SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM
OCT												
31...	0940	48	442	57	--	--	--	--	--	--	--	--
NOV												
26...	1230	34	232	22	--	--	--	--	--	--	--	--
FEB												
05...	0900	54	344	50	--	--	--	--	--	--	--	--
MAR												
10...	1540	110	625	186	--	--	--	--	--	--	--	--
APR												
14...	1500	86	779	181	--	34	43	62	93	99	100	--
MAY												
12...	0945	93	1770	444	--	39	46	76	11	90	100	--
JUN												
09...	0910	52	655	92	--	31	38	63	97	100	100	--
30...	1215	34	195	18	90	--	--	--	--	--	--	--
JUL												
28...	0900	50	249	34	--	--	--	--	--	--	--	--
SEP												
08...	0915	118	4520	1440	--	20	27	49	95	100	100	100

09372000 Mc ELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE	OCT 31,79		NOV 26,79		DEC 31,79		FEB 5,80		MAR 10,80		APR 14,80	
TIME	0940		1230		1045		0900		1540		1500	
TOTAL CELLS/ML	4800		2600		1300		330		120		140	
DIVERSITY: DIVISION	0.9		0.1		1.0		0.3		0.3		0.0	
.CLASS	0.9		0.8		1.0		0.3		0.3		0.0	
..ORDER	1.0		0.8		1.0		0.3		0.7		0.2	
...FAMILY	1.9		2.0		2.1		1.9		1.5		1.6	
....GENUS	1.9		2.0		2.1		1.9		1.5		1.6	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)												
.CHLOROPHYCEAE												
..CHLOROCOCCALES												
...CHLOROCOCCACEAE												
....CHLOROCOCCUM	--	-	19	1	--	-	--	-	--	-	--	-
...OOCYSTACEAE												
....ANKISTRODESMUS	41	1	--	-	27	2	10	3	--	-	--	-
...SCENEDESMACEAE												
....ACTINASTRUM	110	2	--	-	--	-	--	-	--	-	--	-
....SCENEDESMUS	28	1	--	-	--	-	--	-	--	-	--	-
..VOLVOCALES												
...CHLAMYDOMONADACEAE												
....CHLAMYDOMONAS	--	-	--	-	--	-	5	2	5	4	--	-
CHRYSOPHYTA												
.BACILLARIOPHYCEAE												
..CENTRALES												
...COSCINODISCACEAE												
....CYCLOTELLA	41	1	--	-	9	1	--	-	10	9	5	4
..PENNALES												
...ACHNANTHACEAE												
....ACHNANTHES	--	-	--	-	--	-	--	-	--	-	--	-
....RHOICOSPHENIA	*	0	38	1	--	-	--	-	--	-	--	-
...CYMBELLACEAE												
....AMPHORA	--	-	--	-	--	-	--	-	--	-	--	-
....CYMBELLA	55	1	--	-	--	-	--	-	--	-	--	-
....EPITHEMIA	--	-	--	-	--	-	--	-	--	-	--	-
...DIATOMACEAE												
....DIATOMA	--	-	--	-	--	-	--	-	--	-	--	-
....OPEPHORA	--	-	300	11	--	-	--	-	--	-	--	-
...FRAGILARIACEAE												
....SYNEDRA	*	0	75	3	--	-	--	-	5	4	--	-
...GOMPHONEMATACEAE												
....GOMPHONEMA	--	-	--	-	18	1	25	8	--	-	--	-
...NAVICULACEAE												
....GYROSIGMA	*	0	--	-	--	-	--	-	--	-	--	-
....NAVICULA	550	12	1300[3]	49	450[3]	35	170[3]	52	76[3]	65	70[3]	52
...NITZSCHIACEAE												
....NITZSCHIA	150	3	340	13	150	11	60[3]	18	--	-	20	15
...SURIRELLACEAE												
....SURIRELLA	41	1	--	-	300[3]	23	60[3]	18	20[3]	17	40[3]	30
.CHRYSOPHYCEAE												
..CHRYSOMONADALES												
...OCHROMONADACEAE												
....OCHROMONAS	--	-	560[3]	21	--	-	--	-	--	-	--	-
.XANTHOPHYCEAE												
..HETEROCOCCALES												
...CHLOROTHECIACEAE												
....OPHIOCYTIUM	--	-	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)												
.CYANOPHYCEAE												
..HORMOGONALES												
...NOSTOCACEAE												
....NODULARIA	970[3]	20	--	-	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE												
....OSCILLATORIA	2700[3]	58	--	-	340[3]	26	--	-	--	-	--	-
...RIVULARIACEAE												
....RAPHIDIOPSIS	--	-	--	-	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)												
.EUGLENOPHYCEAE												
..EUGLENALES												
...EUGLENACEAE												
....EUGLENA	--	-	--	-	--	-	--	-	--	-	--	-

NOTE: [3] - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09372000 Mc ELMO CREEK NEAR COLORADO-UTAH STATE LINE--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1979 TO SEPTEMBER 1980

DATE TIME	MAY 12,80 0945	JUN 9,80 0910	JUN 30,80 1215	JUL 28,80 0900	SEP 8,80 0915
TOTAL CELLS/ML	550	11000	2000	1700	930
DIVERSITY: DIVISION	1.3	1.0	1.0	0.3	1.0
.CLASS	1.3	1.0	1.0	0.4	1.0
..ORDER	1.3	1.1	1.1	1.3	1.5
...FAMILY	2.7	1.7	1.9	1.5	2.9
....GENUS	2.7	1.7	1.9	1.5	3.0

ORGANISM	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT	CELLS /ML	PER-CENT
CHLOROPHYTA (GREEN ALGAE)										
.CHLOROPHYCEAE										
..CHLOROCOCCALES										
...CHLOROCOCCACEAE										
....CHLOROCOCCUM	--	-	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	14	2	--	-	--	-	--	-	14	2
...SCENEDESMACEAE										
....ACTINASTRUM	--	-	--	-	--	-	--	-	--	-
....SCENEDESMUS	--	-	--	-	--	-	34	2	29	3
..VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	--	-	34	2	29	3
CHRYSOPHYTA										
.BACILLARIOPHYCEAE										
..CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	--	-	160	1	39	2	1100³	62	86	9
..PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	*	0	--	-	--	-	14	2
....RHOICOSPHENIA	14	2	--	-	--	-	--	-	--	-
...CYMBELLACEAE										
....AMPHORA	--	-	--	-	--	-	--	-	14	2
....CYMBELLA	14	2	--	-	--	-	--	-	--	-
....EPITHEMIA	--	-	--	-	--	-	--	-	14	2
...DIATOMACEAE										
....DIATOMA	--	-	--	-	--	-	--	-	14	2
....OPEPHORA	--	-	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
....SYNEDRA	27	5	--	-	--	-	--	-	--	-
...GOMPHONEMATACEAE										
....GOMPHONEMA	--	-	--	-	--	-	--	-	29	3
...NAVICULACEAE										
....GYROSIGMA	--	-	--	-	--	-	--	-	14	2
....NAVICULA	96³	17	3600³	32	620³	31	450³	26	230³	25
...NITZSCHIACEAE										
....NITZSCHIA	55	10	970	9	630³	32	120	7	230³	25
...SURIRELLACEAE										
....SURIRELLA	41	7	700	6	52	3	--	-	72	8
.CHRYSOPHYCEAE										
..CHRYSOMONADALES										
...OCHROMONADACEAE										
....OCHROMONAS	--	-	--	-	--	-	--	-	--	-
.XANTHOPHYCEAE										
..HETEROCOCCALES										
...CHLOROTHECIACEAE										
....OPHIOCYTIUM	--	-	--	-	--	-	17	1	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
.CYANOPHYCEAE										
..HORMOGONALES										
...NOSTOCACEAE										
....NODULARIA	--	-	--	-	--	-	--	-	--	-
...OSCILLATORIACEAE										
....OSCILLATORIA	210³	38	5800³	51	640³	32	--	-	140³	15
...RIVULARIACEAE										
....RAPHIDIOPSIS	69	13	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
.EUGLENOPHYCEAE										
..EUGLENALES										
...EUGLENACEAE										
....EUGLENA	14	2	--	-	13	1	17	1	--	-

NOTE: ³ - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

BEST DOCUMENT AVAILABLE

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO

There are 24 tunnels or ditches, all of which are equipped with water-stage recorders and Parshall flumes or sharp-crested weirs. Records furnished by Colorado Division of Water Resources. The locations of these diversions are given in the following list.

09010000 Grand River ditch diverts water from tributaries of Colorado River to La Poudre Pass Creek (tributary to Cache la Poudre River) in NW¼ sec.21, T.6 N., R.75 W., in Platte River basin. Two collection ditches beginning at headgates located in sec.28, T.5 N., R.76 W., and sec.29, T.6 N., R.75 W., intercept all tributaries upstream on each side of the Colorado River and converge at La Poudre Pass.
REVISIONS (WATER YEARS).--WSP 1313: 1912-27.

09012000 Eureka ditch diverts water from tributaries of Tonahutu Creek between headgate in sec.7, T.4 N., R.74 W., and Sprague Pass, in Colorado River basin, to Spruce Creek (tributary to Big Thompson River) in sec.16, T.4 N., R.74 W., in Platte River basin.
REVISIONS (WATER YEARS).--WSP 1313: 1949.

09013000 Alva B. Adams tunnel diverts water from Grand Lake and Shadow Mountain Lake in NW¼ sec.9, T.3 N., R.75 W., in Colorado River basin, to Lake Estes (Big Thompson River) in sec.30, T.5 N., R.72 W., in Platte River basin. For daily discharge, see elsewhere in this report.

09021500 Berthoud Pass ditch diverts water from tributaries of Fraser River between headgate in sec.33, T.2 S., R.75 W., and Berthoud Pass, in Colorado River basin, to Hoop Creek (tributary to West Fork Clear Creek) in sec.10, T.3 S., R.75 W., in Platte River basin.

09022500 Moffat water tunnel diverts water from tributaries of Williams Fork (via August P. Gumlick and Vasquez tunnels, beginning in 1959) between headgates (in secs.20 and 29, T.3 S., R.76 W.) and west portal of August P. Gumlick tunnel (in sec.28, T.3 S., R.76 W.) and from the main stem and tributaries of Fraser River between headgates (in sec.8, T.2 S., R.76 W., and sec.24, T.1 S., R.75 W.) and west portal of Moffat tunnel (in sec.11, T.2 S., R.75 W.), in Colorado River basin, to South Boulder Creek, in sec.2, T.2 S., R.74 W., in Platte River basin. (See sta. 09036000 for diversions by August P. Gumlick tunnel.)

09042000 Hoosier Pass tunnel diverts water from tributaries of Blue River in Colorado River basin to Montgomery Reservoir (Middle Fork South Platte River) in sec.14, T.8 S., R.78 W., in Platte River basin; this water is again diverted to South Catamount Creek (tributary to Catamount Creek) in SE¼ sec.14, T.13 S., R.69 W., in the Arkansas River basin. Collection conduits extending from the right bank of Crystal Creek (tributary to Spruce Creek) in sec.14, T.7 S., R.78 W., right bank of Spruce Creek in sec.23, T.7 S., R.78 W., right bank of McCullough Gulch in sec.26, T.7 S., R.78 W., right bank of Monte Cristo Creek in SW¼NE¼ sec.2, T.8 S., R.78 W., left bank of Bemrose Creek in SW¼SW¼ sec.6, T.8 S., R.77 W., and intercepting intermediate tributaries, transport diversions to north portal of the tunnel.

09046000 Boreas Pass ditch diverts water from tributaries of Blue River between headgate in sec.26, T.7 S., R.77 W., and Boreas Pass, in Colorado River basin, to Tarryall Creek in sec.26, T.7 S., R.77 W., in Platte River basin.
REVISIONS (WATER YEARS).--WSP 1733: 1958.

09047300 Vidler tunnel diverts water from tributaries of Peru Creek (tributary to Snake River) in sec.9, T.5 S., R.75 W., in Blue River basin, to Leavenworth Creek (tributary to South Clear Creek) in sec.10, T.5 S., R.75 W., in Platte River basin.

09050590 Harold D. Roberts tunnel diverts water from Dillon Reservoir (Blue River) in sec.18, T.5 S., R.77 W., in Blue River basin, to North Fork South Platte River (tributary to South Platte River) in SW¼SW¼ sec.4, T.7 S., R.74 W., in Platte River basin. Figures include a small amount of ground-water inflow between Dillon Reservoir and east portal of tunnel.

09061500 Columbine ditch diverts water from tributaries of Eagle River in sec.5, T.8 S., R.79 W., in Colorado River basin to Chalk Creek (tributary to East Fork Arkansas River) in NW¼ sec.9, T.8 S., R.79 W., in Arkansas River basin.

09062900 Ewing ditch diverts water from Piney Creek in sec.11, T.8 S., R.80 W., in Eagle River basin, to Thayer Gulch (tributary to Tennessee Creek) in sec.11, T.8 S., R.80 W., in Arkansas River basin.

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO--Continued

09062500 Wurtz ditch diverts water from tributaries of Eagle River between headgate in sec.32, T.7 S., R.80 W., and Tennessee Pass, in Colorado River basin, to West Tennessee Creek (tributary to Tennessee Creek) in sec.17, T.8 S., R.80 W., in Arkansas River basin.

09063700 Homestake tunnel diverts water from Homestake Lake (Middle Fork Homestake Creek), in sec.17, T.8 S., R.81 W., in Eagle River basin, to Lake Fork in sec.9, T.9 S., R.81 W., in Arkansas River basin. Water is imported to Homestake Lake from tributaries of Homestake Creek by collection conduits that extend from right bank of French Creek in sec.28, T.7 S., R.81 W., and left bank of East Fork Homestake Creek in sec.9, T.8 S., R.81 W., and intercept intermediate tributaries.

09073000 Twin Lakes tunnel diverts water from tributaries of Roaring Fork River between headgates (in sec.21, T.11 S., R.83 W., and sec.2, T.11 S., R.83 W.), and west portal of Twin Lakes tunnel (in sec.24, T.11 S., R.83 W), in Colorado River basin, to North Fork Lake Creek in sec.22, T.11 S., R.82 W., in Arkansas River basin.

09077160 Charles H. Boustead Tunnel diverts water from the main stem and tributaries of Fryingpan River (tributary to Roaring Fork River), in Colorado River basin, to Lake Fork in sec.10, T.9 S., R.81 W., in Arkansas River basin. Water is transported to west portal of tunnel (at lat 39°14'44", long 106°31'47"), by a series of collection conduits extending between headgates on right bank of Sawyer Creek at lat 39°15'58", long 106°38'19", and right bank of Fryingpan River at lat 39°14'40", long 106°31'49", and intercepting intermediate tributaries.

09077500 Busk-Ivanhoe tunnel diverts water from Ivanhoe Lake (Ivanhoe Creek), tributary to Fryingpan River in sec.13, T.9 S., R.82 W., in Roaring Fork River basin, to Busk Creek (tributary to Lake Fork) in sec.20, T.9 S., R.81 W., in Arkansas River basin.

09115000 Larkspur ditch diverts water from tributaries of Tomichi Creek between headgates (in sec.11, T.48 N., R.6 E., and sec.1, T.47 N., R.6 E.), and Marshall Pass, in Gunnison River basin, to Poncha Creek (tributary to South Arkansas River) in SE¼ sec.24, T.48 N., R.6 E., in Arkansas River basin.

09118200 Tarbell ditch diverts water from Lake Fork Cochetopa Creek (tributary to Cochetopa Creek), in NW¼ sec.18, T.43 N., R.2 E., in Gunnison River basin, to Lake Fork Saguache Creek (tributary to Middle Fork Saguache Creek) in NE¼ sec.18, T.43 N., R.2 E., in Rio Grande Basin. All records available prior to October 1960 published in WSP 1733.

REVISIONS (WATER YEARS).--WSP 1733: 1949-51.

09121000 Tabor ditch diverts water from tributaries of Cebolla Creek in secs.29 and 36, T.43 N., R.3 W., in Gunnison River basin, to Big Spring Creek (tributary to North Clear Creek) in sec.35, T.43 N., R.3 W., in Rio Grande basin.

09341000 Treasure Pass diversion ditch diverts water from tributaries of Wolf Creek between headgates (in sec.31, T.38 N., R.2 E., and sec.6, T.37 N., R.3 E.), and Wolf Creek Pass, in San Juan River basin, to tributary of South Fork Rio Grande in sec.31, T.38 N., R.2 E., in Rio Grande basin.

09347000 Don La Font ditches 1 and 2 divert water from tributaries of Piedra River between headgates in NW¼ sec.4, T.38 N., R.1 W., and SW¼ sec.33, T.39 N., R.1 W.), and Piedra Pass, in San Juan River basin, to South River in sec.4, T.38 N., R.1 W., in Rio Grande basin.

09348000 Williams Creek-Squaw Pass ditch diverts water from Williams Creek (tributary to Piedra River) in sec.13, T.39 N., R.3 W., in San Juan River basin, to Squaw Creek in sec.10, T.39 N., R.3 W., in Rio Grande basin.

09351000 Pine River-Weminuche Pass ditch diverts water from North Fork Los Pinos River (tributary to Los Pinos River) in sec.4, T.39 N., R.4 W., in San Juan River basin, to Weminuche Creek in sec.33, T.40 N., R.4 W., in Rio Grande basin.

09351500 Weminuche Pass ditch diverts water from left bank of Rincon la Vaca Creek (tributary to Los Pinos River) in sec.5, T.39 N., R.4 W., in San Juan River basin, to Weminuche Creek in sec.33, T.40 N., R.4 W., in Rio Grande basin.

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1979 TO SEPTEMBER 1980

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year
TO PLATTE RIVER BASIN													
09010000 Grand River ditch...	0	0	0	0	0	0	0	0	5,530	6,360	1,150	286	13,330
09012000 Eureka ditch........	0	0	0	0	0	0	0	0	0	0	0	0	0
09013000 Alva B. Adams tunnel	12,580	12,830	14,750	17,800	19,980	18,340	8,600	4,860	1,940	12,190	19,060	14,520	157,400
09021500 Berthoud Pass ditch.	0	0	0	0	0	0	0	0	253	402	89	32	777
09022500 Moffat water tunnel.	2,630	910	712	637	474	459	514	3,140	9,490	11,830	5,350	3,110	39,260
09046000 Boreas Pass ditch...	0	0	0	0	0	0	0	0	0	28	5.4	0	33
09047300 Vidler tunnel.......	0	0	0	0	0	0	0	0	0	46	144	107	376
09050590 Harold D. Roberts tunnel............	3,980	6,300	4,860	4,890	4,370	1,760	0	0	0	666	13,810	11,330	51,940
Total........................	19,190	20,040	20,320	23,330	24,820	20,560	9,110	8,000	17,210	31,520	39,610	29,380	263,120
TO ARKANSAS RIVER BASIN													
09042000 Hoosier Pass tunnel.	205	0	0	0	0	0	0	177	1,700	1,570	2,050	0	5,700
09061500 Columbine ditch.....	0	0	0	0	0	0	0	85	1,360	255	58	23	1,780
09062000 Ewing ditch.........	16	0	0	0	0	0	0	100	722	192	84	48	1,160
09062500 Wurtz ditch.........	0	0	0	0	0	0	0	311	2,460	461	75	28	3,340
09063700 Homestake tunnel....	0	0	4,490	6,120	7,600	2,290	5,820	5,640	0	0	0	0	31,960
09073000 Twin Lakes tunnel...	15	27	32	46	59	77	76	4,290	15,380	2,640	69	98	22,810
09077160 Charles H. Boustead Tunnel............	0	0	0	0	0	0	0	6,180	39,400	9,810	0	0	55,390
09077500 Busk-Ivanhoe tunnel.	23	10	0	0	0	0	0	296	4,580	949	54	38	5,950
09115000 Larkspur ditch......	18	0	0	0	0	0	0	0	149	161	37	7.5	371
Total........................	277	37	4,520	6,170	7,660	2,370	5,900	17,080	65,750	16,040	2,430	242	128,460
TO RIO GRANDE BASIN													
09118200 Tarbell ditch.......	0	0	0	0	0	0	0	0	94	272	114	62	542
09121000 Tabor ditch.........	0	0	0	0	0	0	0	13	558	192	72	59	894
09341000 Treasure Pass diversion ditch........	0	0	0	0	0	0	0	0	180	110	0	0	290
09347000 Don La Font ditches No. 1 and 2.......	0	0	0	0	0	0	0	0	0	33	0	0	33
09348000 Williams Creek-Squaw Pass ditch........	0	0	0	0	0	0	0	0	0	0	0	0	0
09351000 Pine River-Weminuche Pass ditch........	0	0	0	0	0	0	0	0	41	109	0	0	150
09351500 Weminuche Pass ditch	0	0	0	0	0	0	0	0	1,140	790	0	0	1,930
Total........................	0	0	0	0	0	0	0	13	2,010	1,510	186	121	3,840
Grand Total.................	19,470	20,080	24,840	29,500	32,480	22,930	15,010	25,090	84,970	49,070	42,230	31,920	395,420

NOTE: Due to method of computing water year figures and rounding procedures, totals do not agree.

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1980

Station number	Station name	Location	Total drainage area (mi^2)	Non-contributing	Period of record	Annual maximum Date	Annual maximum Gage height (feet)	Annual maximum Discharge (ft^3/s)
		DOLORES RIVER BASIN						
09168700	Disappointment Creek tributary near Slick Rock, CO	Lat 38°01'33", long 108°48'51", in SW¼SW¼ sec.36, T.44 N., R.18 W., San Miguel County, at twin culverts at State Highway 141, 5 mi (8 km) southeast of Slick Rock. Discontinued 9-30-80.	a1.73	a0.03	1970-80	5-4-80	10.16	44
09169800	East Paradox Creek tributary near Bedrock, CO	Lat 38°16'53", long 108°48'21", in NE¼SW¼ sec.36, T.47 N., R.18 W., Montrose County, at culvert at State Highway 90, 5.5 mi (8.8 km) southeast of Bedrock. Discontinued 9-30-80.	a4.14	-	1970-80	1980	(b)	<26
09175800	Dead Horse Creek near Naturita, CO	Lat 38°02'37", long 108°34'38", in NE¼SE¼ sec.25, T.44 N., R.16 W., San Miguel County, at culvert at State Highway 141, 12.1 mi (19.5 km) south of Naturita. Discontinued 9-30-80.	a5.30	-	1970-80	7-25-80	12.85	104
09179600	West Creek tributary near Gateway, CO	Lat 38°43'01", long 108°55'28", in NW¼SE¼ sec.29, T.15 S., R.103 W., Mesa County, on box culvert at State Highway 141, 3 mi (5 km) northeast of Gateway. Discontinued 9-30-80.	2.27	-	1973-80	8-23-80	10.56	63
		GREEN RIVER BASIN						
09238500	Walton Creek near Steamboat Springs, CO	Lat 40°24'29", long 108°47'11", in SW¼NW¼ sec.11, T.5 N., R.85 W., Routt County, on left bank 0.4 mi (0.6 km) downstream from Beaver Creek and 6.0 mi (9.7 km) southeast of Steamboat Springs.	62.4	-	1920-22, 1965-73 1978-80	1978 1979 1980	2.98 2.73 2.68	2,300 1,650 1,550
09250900	Lay Creek tributary near Lay, CO	Lat 40°31'31", long 107°55'28", in NE¼SE¼ sec.27, T.7 N., R.94 W., Moffat County, on left bank at culvert under U.S. Highway 40, 0.2 mi (0.3 km) upstream from mouth, 2.5 mi (4.0 km) west of Lay, and 22 mi (35 km) west of Craig. Discontinued 9-30-80.	a0.99	-	1977-80	8-23-80	10.56	11
09259750	Little Snake River tributary near Great Divide, CO	Lat 40°53'10", long 108°05'47", in SE¼NE¼ sec.30, T.11 N., R.95 W., Moffat County, on right bank at culvert on county road 21, 1.2 mi (1.9 km) upstream from mouth, and 15 mi (24 km) northwest of Great Divide. Discontinued 9-30-80.	a3.37	-	1974-80	1980	(b)	<3.7
09306315	Gillam Draw near Rangely, CO	Lat 40°05'31", long 108°44'45", in NE¼NE¼ sec.5, T.1 N., R.101 W., Rio Grande County, on right bank 20 ft (6 m) downstream from bridge on State Highway 64, 0.8 mi (1.3 km) upstream from mouth, and 3.0 mi (4.8 km) east of Rangely. Discontinued 9-30-80.	13.6	0.34	1974-80	9-10-80	c13.58	412

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER 1979—Continued

Station number	Station name	Location	Total drainage area (mi²)	Non-contributing	Period of record	Annual maximum		
						Date	Gage height (feet)	Discharge (ft³/s)
		GREEN RIVER BASIN—Continued						
09306390	West Twin Wash near Dinosaur, CO	Lat 40°14'34", long 108°57'16", in NE¼SE¼ sec.9, T.3 N., R.103 W., Moffat County, on left bank at culvert on U.S. Highway 40, 1.5 mi (2.4 km) upstream from mouth, and 2.9 mi (4.7 km) east of Dinosaur. Discontinued 9-30-80.	a4.22	a0.09	1974-80	1980	(b)	<30
09361400	Junction Creek near Durango, CO	Lat 37°20'04", long 107°54'35", in sec.36, T.36 N., R.10 W., La Plata County, on left bank 4.5 mi (7.2 km) upstream from mouth and 4.5 mi (7.2 km) northwest of Durango.	26.3	-	1959-65 1979-80	- 1979 1980	--- (d) 3.64	--- --- 600
		SAN JUAN RIVER BASIN						
09371300	McElmo Creek tributary near Cortez, CO	Lat 37°20'51", long 108°28'56", in NE¼SE¼ sec.27, T.36 N., R.15 W., Montezuma County, at bridge on U.S. Highway 160, 5.8 mi (9.3 km) east of Cortez. Discontinued 9-30-80.	4.43	a4.39	1971-80	1980	(b)	<8

a Revised.
b Peak stage did not reach bottom of gage.
c From floodmark.
d Not determined.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING THE 1980 WATER YEAR

Station no.	Stream	Tributary to	Location	Date	Discharge (ft³/s)
	GREEN RIVER BASIN				
-----------	Williams Fork River at Highway 37 bridge above Hamilton, CO.	Yampa River	Lat 40°21'56", long 107°31'06"	6-10-80	1,080
-----------	Williams Fork River at mouth near Hamilton, CO.	-----do-----	Lat 40°26'14", long 107°38'50"	6-10-80	1,150

09165000 - DOLORES RIVER BELOW RICO, CO. (LAT 37 38 20 LONG 108 03 35)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1979			
03...	1050	520	7.0
29...	1020	510	3.0
DEC			
03...	1120	650	1.0
JAN , 1980			
07...	1100	790	1.0
FEB			
11...	1045	610	.0
MAR			
24...	1205	470	.0
APR , 1980			
24...	1025	300	3.5
MAY			
19...	1215	290	8.0
22...	1315	210	8.0
JUN			
02...	1125	140	5.5
16...	1210	130	5.5
JUL			
07...	1130	180	10.0
29...	1515	305	16.0

09166500 - DOLORES RIVER AT DOLORES, CO. (LAT 37 28 16 LONG 108 30 15)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1979			
01...	0925	440	9.0
29...	0850	460	3.5
DEC			
03...	0930	510	1.0
JAN , 1980			
07...	0920	590	1.0
FEB			
11...	0910	600	.0
MAR			
24...	0900	410	.0
APR			
23...	0800	170	4.0
MAY , 1980			
19...	0955	205	8.0
JUN			
02...	0905	150	6.5
16...	0950	125	7.0
JUL			
07...	0940	190	13.0
29...	1320	260	19.0
SEP			
02...	0820	280	12.0

09168100 - DISAPPOINTMENT CREEK NEAR DOVE CREEK, CO. (LAT 37 52 36 LONG 108 34 57)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1979			
01...	1130	5100	14.0
30...	1120	4000	3.5
JAN , 1980			
08...	1555	3600	1.0
FEB			
12...	1410	3900	1.0
MAR			
25...	0900	2300	.0
APR			
22...	1230	1100	14.0
23...	0800	1040	4.0
MAY			
20...	1620	1100	15.0
JUN , 1980			
03...	1630	850	15.0
18...	1000	590	12.5
JUL			
07...	1400	1550	19.0
09...	1255	1700	23.0
AUG			
05...	1645	3600	20.0
19...	1330	3920	23.0
SEP			
02...	1555	3600	20.0

09172500 - SAN MIGUEL RIVER NEAR PLACERVILLE, CO. (LAT 38 02 05 LONG 108 07 15)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1979			
03...	0825	420	7.5
29...	1205	450	4.0
DEC			
03...	1335	630	2.0
JAN , 1980			
07...	1320	540	2.0
FEB			
11...	1245	380	1.0
MAR			
24...	1410	460	6.0
APR			
24...	0825	320	3.0
MAY , 1980			
22...	0955	280	6.5
JUN			
02...	1340	270	6.0
19...	0825	70	7.0
JUL			
10...	0835	200	9.5
AUG			
04...	1025	280	13.0
SEP			
02...	1140	300	12.0

09172600 - SALTADO CREEK NEAR NORWOOD, CO. (LAT 37 55 24 LONG 108 07 52)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
MAY , 1980			
19...	1500	140	5.0
JUN			
04...	1150	150	10.0
16...	1420	145	13.0
JUL , 1980			
07...	1440	170	14.0
AUG			
04...	1120	200	15.0

09172700 - GURLEY DITCH NEAR NORWOOD, CO. (LAT 38 00 54 LONG 108 14 27)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1979				JUL , 1980			
02...	1500	185	15.0	07...	1650	120	15.0
APR , 1980				AUG			
28...	1545	100	5.0	04...	1640	220	15.0
MAY				SEP			
20...	0825	110	5.0	03...	1620	170	21.0
JUN							
04...	0830	75	4.0				
18...	1510	90	13.0				

09172800 - WEST BEAVER CREEK NEAR NORWOOD, CO. (LAT 37 53 21 LONG 108 11 49)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
APR , 1980				JUL , 1980			
28...	1200	100	2.0	07...	1530	85	11.5
MAY				AUG			
20...	1035	60	3.0	04...	1305	95	10.0
JUN							
04...	0955	55	1.5				
16...	1600	78	11.0				

09174700 - WEST NATURITA C AT UPPER STA, NEAR NORWOOD, CO. (LAT 37 54 39 LONG 108 20 08)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
MAR , 1980				JUN , 1980			
26...	1315	230	1.0	18...	1145	115	10.0
APR				JUL			
22...	1635	190	5.0	09...	1425	175	18.0
MAY				AUG			
20...	1440	145	8.0	04...	1410	230	20.0
JUN							
02...	1735	90	8.5				

09175200 - LILYLANDS CANAL NEAR NORWOOD, CO. (LAT 38 01 24 LONG 108 23 03)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
APR , 1980				JUL , 1980			
22...	1415	280	13.0	09...	1400	245	24.5
MAY				AUG			
20...	1330	270	14.0	04...	1510	375	17.0
JUN							
02...	1630	390	18.0				
18...	1305	280	15.0				

09175400 - MAVERICK DRAW NEAR NORWOOD, CO. (LAT 38 10 32 LONG 108 19 52)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1979				MAY , 1980			
02...	1620	1450	16.0	22...	0735	850	11.0
29...	1315	1590	5.5	JUN			
DEC				18...	1645	900	20.0
03...	1445	1010	4.0	JUL			
JAN , 1980				09...	1720	980	23.5
07...	1420	1700	2.0	AUG			
FEB				06...	0710	980	14.0
12...	1555	1520	5.0	SEP			
MAR				03...	1515	1350	19.5
24...	1525	1410	6.5				
APR							
30...	0730	1460	8.0				

09177000 - SAN MIGUEL RIVER AT URAVAN, CO. (LAT 38 21 26 LONG 108 42 44)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1979				APR , 1980			
02...	1120	1650	14.0	29...	0855	220	8.0
29...	1525	880	8.0	MAY			
DEC				21...	0905	350	11.0
04...	1500	940	3.0	JUN			
JAN , 1980				17...	1530	430	16.0
08...	1355	730	2.0	JUL			
FEB				08...	1640	410	24.0
12...	1155	700	1.0	AUG			
MAR				05...	1215	860	21.0
25...	1050	930	8.0	SEP			
APR				03...	1230	970	18.0
23...	0835	280	5.0				

09236000 - BEAR RIVER NEAR TOPONAS, CO. (LAT 40 02 36 LONG 107 04 18)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
MAY , 1980				JUL , 1980			
09...	1000	125	12.5	31...	1425	85	14.0
JUN							
10...	1230	90	9.0				

09239500 - YAMPA RIVER AT STEAMBOAT SPRINGS, CO. (LAT 40 29 01 LONG 106 49 54)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1979				MAY , 1980			
24...	1000	310	10.5	21...	1210	160	8.0
NOV				JUN			
21...	1130	300	1.0	09...	1735	60	11.5
JAN , 1980				JUL			
23...	1330	105	.5	24...	1045	280	20.0
FEB							
26...	1200	205	1.0				

09241000 - ELK RIVER AT CLARK, CO. (LAT 40 43 03 LONG 106 54 55)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1979				JUN , 1980			
02...	1300	--	8.0	11...	0900	450	5.0
JAN , 1980				JUL			
23...	1200	105	.0	28...	1345	60	14.0
APR							
29...	1145	150	4.0				

09250000 - MILK CREEK NEAR THORNBURGH, CO. (LAT 40 11 37 LONG 107 43 54)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
MAR , 1980				JUL , 1980			
04...	1530	915	5.0	14...	1115	1900	--
APR				AUG			
14...	1245	1100	10.0	27...	1030	900	16.0
JUN							
04...	1530	--	12.5				

09255000 - SLATER FORK NEAR SLATER, CO. (LAT 40 58 54 LONG 107 22 58)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1979				MAR , 1980			
30...	1300	450	2.0	17...	1600	280	2.0
DEC				MAY			
19...	1500	280	.0	06...	1400	190	4.5

09258000 - WILLOW CREEK NEAR DIXON, WY. (LAT 40 54 56 LONG 107 31 16)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
MAR , 1980				AUG , 1980			
18...	1330	270	.0	14...	1130	--	18.0
MAY							
07...	1120	330	7.0				

09302450 - LOST CREEK NEAR BUFORD, CO. (LAT 40 03 01 LONG 107 28 08)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1979				MAY , 1980			
01...	1130	450	8.5	07...	1450	290	5.0
DEC				JUN			
04...	1100	360	.5	05...	1357	90	11.5
JAN , 1980				JUL			
21...	1055	370	1.0	10...	0930	320	13.5
APR				AUG			
24...	1100	200	2.5	07...	1345	300	20.0

09302500 - MARVINE CREEK NEAR BUFORD, CO. (LAT 40 02 10 LONG 107 29 15)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1979				JUN , 1980			
01...	1500	270	9.5	05...	1500	--	11.5
DEC				JUL			
04...	1155	310	1.5	10...	1040	240	11.5
JAN , 1980				AUG			
21...	1145	--	1.0	07...	1430	250	15.0
APR							
24...	1215	150	2.0				

09303000 - NORTH FORK WHITE RIVER AT BUFORD, CO. (LAT 39 59 15 LONG 107 36 50)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
JAN , 1989				MAY , 1980			
21...	1310	280	.0	07...	1315	260	5.0
APR				JUL			
14...	1050	340	4.5	10...	1210	260	14.5

09303300 - SOUTH FORK WHITE RIVER AT BUDGES RESORT, CO. (LAT 39 50 36 LONG 107 20 03)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1979				APR , 1980			
02...	1500	160	8.0	08...	1500	140	3.0
DEC							
06...	1415	140	--				

09303400 - SOUTH FORK WHITE RIVER NEAR BUDGES RESORT, CO. (LAT 39 51 51 LONG 107 32 00)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
MAY , 1980			
20...	1120	140	6.0

09303500 - SOUTH FORK WHITE RIVER NEAR BUFORD, CO. (LAT 39 55 10 LONG 107 33 04)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
DEC , 1979				AUG , 1980			
13...	1245	--	.5	04...	1350	250	13.5

09304000 - SOUTH FORK WHITE RIVER AT BUFORD, CO. (LAT 39 58 20 LONG 107 37 29)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
DEC , 1979				MAY , 1980			
04...	1400	240	.5	07...	1130	280	4.5
JAN , 1980				JUL			
21...	1350	230	.0	10...	1340	250	14.5
APR							
14...	1140	260	4.0				

09304500 - WHITE RIVER NEAR MEEKER, CO. (LAT 40 02 01 LONG 107 51 42)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
MAY , 1980				MAY , 1980			
05...	1430	320	9.5	30...	1150	345	7.5
12...	1300	240	5.0				

09339900 - EF SAN JUAN R AB SAND CREEK, NR PAGOSA SPGS, CO. (LAT 37 23 23 LONG 106 50 26)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1979				MAY , 1980			
04...	0950	160	6.5	21...	1135	100	9.0
NOV				JUL			
06...	0930	150	1.0	01...	1600	170	15.0
DEC				AUG			
03...	1305	155	.0	04...	1220	120	16.0
MAR , 1980				SEP			
21...	1425	175	2.0	09...	0820	135	12.0
MAY							
05...	0950	100	4.5				

09340000 - EAST FORK SAN JUAN RIVER NR PAGOSA SPRINGS, CO. (LAT 37 22 10 LONG 106 53 30)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1979				MAY , 1980			
04...	1105	130	7.0	05...	1115	100	5.5
NOV				21...	1415	70	9.0
06...	1025	140	2.0	JUL			
DEC				01...	1820	65	13.0
03...	1450	150	.0	AUG			
FEB , 1980				04...	1340	110	18.0
21...	1500	180	.0	SEP			
MAR				09...	0955	100	13.0
21...	1530	160	3.0				

09342500 - SAN JUAN RIVER AT PAGOSA SPRINGS, CO. (LAT 37 15 50 LONG 107 00 37)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
OCT , 1979				MAY , 1980			
04...	0910	430	10.0	21...	1025	90	14.0
NOV				JUL			
06...	1320	180	3.0	02...	0710	100	13.0
DEC				AUG			
04...	0855	190	1.0	04...	1605	140	23.0
FEB , 1980				SEP			
21...	1645	390	3.5	08...	1520	210	22.0
MAR							
20...	1250	250	3.0				

09344000 - NAVAJO R AT BANDED PEAK RANCH, NEAR CHROMO, CO. (LAT 37 05 07 LONG 106 41 20)

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
MAR , 1980				APR , 1980			
10...	1130	--	1.0	08...	1335	--	9.5
24...	1415	--	8.5				

09346000 - NAVAJO RIVER AT EDITH, CO. (LAT 37 00 10 LONG 106 54 25)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1979 04...	1310	260	13.0	APR , 1980 24...	1015	300	4.0
NOV 06...	1200	230	2.0	MAY 21...	1605	240	11.0
DEC 04...	1220	240	.0	JUL 01...	1340	215	20.0
FEB , 1980 22...	0910	315	1.0	AUG 04...	0920	240	14.0
MAR 28...	1050	320	.0	SEP 08...	1340	260	20.0

09346400 - SAN JUAN RIVER NEAR CARRACAS, CO. (LAT 37 00 49 LONG 107 18 42)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1979 11...	1020	--	1.0	MAY , 1980 05...	1425	260	12.0
29...	1030	--	7.0	22...	1140	160	9.0
DEC 06...	1115	--	.0	JUL 02...	1240	100	18.0
JAN , 1980 02...	1340	410	1.0	AUG 05...	0900	290	17.0
FEB 22...	1400	610	3.5	28...	1130	290	19.0
MAR 28...	1335	800	3.0				

09347205 - MIDDLE FORK PIEDRA RIVER NEAR DYKE, CO. (LAT 37 27 10 LONG 107 10 33)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1979 04...	1040	70	7.0	MAY , 1980 05...	1350	80	8.0
NOV 06...	1445	70	4.0	21...	0915	60	3.0
DEC 03...	1025	80	.0	JUL 01...	1050	50	8.0
FEB , 1980 21...	1200	120	.0	AUG 04...	1810	60	21.0
MAR 21...	1020	60	3.0	SEP 09...	1210	60	12.0

09349800 - PIEDRA RIVER NEAR ARBOLES, CO. (LAT 37 05 18 LONG 107 23 50)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1979 11...	1100	--	11.0	APR , 1980 23...	1445	190	6.0
29...	1200	--	10.0	MAY 05...	1635	200	8.0
DEC 06...	1200	--	1.0	22...	0910	180	6.0
JAN , 1980 02...	1210	500	1.0	JUL 02...	1025	120	15.0
FEB 22...	1150	560	2.0	AUG 05...	1050	220	18.0
MAR 28...	1450	420	3.0	28...	1010	300	16.0

09354500 - LOS PINOS RIVER AT LA BOCA, CO. (LAT 37 00 34 LONG 107 35 56)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1979 04...	1000	--	13.0	MAR , 1980 28...	1020	470	3.0
30...	1200	--	9.0	MAY 05...	1005	180	8.0
NOV 23...	1215	--	.0	22...	1530	180	14.0
DEC 05...	1530	--	7.0	JUL 14...	0940	220	17.0
JAN , 1980 02...	1020	275	.0	AUG 05...	1350	160	27.0
FEB 19...	1250	360	4.0	SEP 08...	0905	230	17.0

09355000 - SPRING CREEK AT LA BOCA, CO. (LAT 37 00 40 LONG 107 35 47)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1979 15...	0955	--	7.0	MAR , 1980 28...	0910	950	3.0
30...	1025	--	5.0	MAY 05...	1130	295	12.0
NOV 23...	1040	--	.0	22...	1605	400	18.0
DEC 05...	1540	--	.0	JUL 14...	1140	280	21.0
JAN , 1980 02...	0920	1200	.0	AUG 05...	1425	260	28.0
FEB 19...	1420	410	3.5	SEP 08...	1015	270	16.0

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
09357500 - ANIMAS RIVER AT HOWARDSVILLE, CO. (LAT 37 49 59 LONG 107 35 56)							
FEB , 1980				APR , 1980			
26...	1345	--	3.0	09...	1420	--	9.0
MAR				25...	1400	--	10.0
13...	1215	--	.0	MAY			
26...	1215	--	.0	15...	1010	--	3.0
09361000 - HERMOSA CREEK NEAR HERMOSA, CO. (LAT 37 25 19 LONG 107 50 40)							
OCT , 1979				MAY , 1980			
05...	0820	750	7.0	06...	0940	240	3.0
31...	0800	500	5.0	23...	0845	220	3.0
DEC				JUN			
05...	1345	700	2.0	05...	0900	180	4.0
27...	0910	400	.5	JUL			
FEB , 1980				01...	1330	270	13.0
07...	0925	800	.0	29...	1400	560	16.0
25...	1350	810	1.0	AUG			
MAR				29...	0845	620	11.0
18...	0900	540	.0				
APR							
17...	0940	450	4.0				
09361500 - ANIMAS RIVER AT DURANGO, CO. (LAT 37 16 45 LONG 107 52 47)							
OCT , 1979				APR , 1980			
23...	1405	700	9.[illegible]	25...	1025	335	6.0
NOV				MAY			
21...	1435	680	3.0	23...	0915	190	6.0
DEC				JUN			
20...	1310	400	3.0	25...	0955	145	10.0
JAN , 1980				JUL			
23...	1325	610	3.0	24...	1110	400	14.0
FEB				AUG			
19...	0845	650	4.0	22...	1040	600	15.0
MAR				SEP			
20...	1120	600	5.0	22...	1325	540	14.0
09363050 - FLORIDA R BL FLOR FARMERS DITCH, NR DURANGO, CO. (LAT 37 17 42 LONG 107 47 28)							
OCT , 1979				APR , 1980			
04...	1515	200	15.0	16...	1350	300	8.0
NOV				MAY			
05...	1500	300	6.0	07...	1125	220	7.0
DEC				JUN			
06...	1240	270	1.0	10...	1240	190	10.0
27...	1130	180	.5	JUL			
FEB , 1980				01...	1100	165	11.0
07...	1120	290	.0	29...	1210	170	14.0
MAR				AUG			
18...	1100	420	.0	29...	1155	175	12.0
09363100 - SALT CREEK NEAR OXFORD, CO. (LAT 37 08 23 LONG 107 45 10)							
OCT , 1979				APR , 1980			
05...	1505	180	14.0	07...	1450	240	7.0
NOV				16...	1140	585	11.0
05...	1320	580	6.5	MAY			
DEC				06...	1420	1000	15.0
06...	1415	775	2.0	JUL			
27...	1330	900	.5	24...	0830	160	17.0
FEB , 1980				AUG			
07...	1315	1200	1.0	29...	1030	180	16.0
MAR				SEP			
18...	1220	405	5.0	10...	0835	180	16.0
09363200 - FLORIDA RIVER AT BONDAD, CO. (LAT 37 03 24 LONG 107 52 09)							
OCT , 1979				APR , 1980			
05...	1220	380	14.0	08...	0925	310	3.0
NOV				16...	0945	340	6.0
05...	1130	580	6.0	MAY			
DEC				06...	1240	260	9.0
06...	1550	380	4.0	28...	1130	580	8.0
27...	1510	--	3.0	JUL			
FEB , 1980				01...	0945	330	19.0
07...	1450	580	4.0	29...	1010	360	19.5
MAR				AUG			
18...	1405	500	10.0	29...	0900	390	15.0

09365500 - LA PLATA RIVER AT HESPERUS, CO. (LAT 37 17 23 LONG 108 02 24)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
MAR , 1980				APR , 1980			
04...	1235	--	1.0	25...	0900	--	3.5
17...	1330	--	1.5	MAY			
APR				16...	1155	--	5.5
01...	1120	--	.0				

09371000 - MANCOS RIVER NEAR TOWAOC, CO. (LAT 37 01 39 LONG 108 44 27)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1979				MAY , 1980			
05...	1035	2200	12.0	06...	1300	750	13.0
NOV				29...	1200	510	12.0
05...	1135	2300	5.0	JUN			
DEC				06...	1150	375	13.0
07...	1035	2450	.0	24...	1205	520	13.5
FEB , 1980				AUG			
04...	1205	2200	4.0	14...	1200	1850	22.0
MAR				20...	1020	1700	18.0
11...	0950	2220	6.0	SEP			
31...	1310	2250	6.0	12...	1255	1000	18.0
APR							
14...	1120	1200	9.5				

09371420 - MCELMO CREEK ABOVE ALKALI CANYON, NR CORTEZ, CO. (LAT 37 19 38 LONG 108 38 55)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1979				MAY , 1980			
09...	1020	3000	10.0	12...	1255	3000	9.0
NOV				JUN			
20...	1130	2900	4.0	09...	1240	2300	17.0
DEC				30...	0940	1700	20.0
26...	1130	2400	.0	JUL			
FEB , 1980				28...	1225	1850	20.0
04...	1450	3800	4.0	SEP			
MAR				08...	1220	2050	17.0
10...	1200	4000	5.0				
APR							
14...	1015	2900	5.0				

09371495 - MUD CREEK NEAR CORTEZ, CO. (LAT 37 19 10 LONG 108 40 03)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1979				MAY , 1980			
09...	1225	4000	15.0	12...	1220	3500	10.0
NOV				JUN			
20...	1320	5000	2.5	09...	1330	2600	20.0
DEC				24...	1330	2100	19.0
26...	1305	3800	.0	JUL			
FEB , 1980				28...	1310	1900	20.0
04...	1600	5500	4.5	SEP			
MAR				08...	1305	2300	18.0
10...	1355	7800	5.0				
APR							
14...	0950	4900	4.5				

09371700 - MCELMO CREEK BELOW CORTEZ, CO. (LAT 37 20 26 LONG 108 48 19)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1979				MAY , 1980			
31...	1115	2900	4.0	12...	1115	2900	9.0
NOV				JUN			
26...	1555	3000	5.0	09...	1105	1850	16.0
DEC				30...	1120	1850	21.0
26...	1435	2500	2.0	JUL			
FEB , 1980				28...	1110	1750	18.0
05...	1120	3300	3.0	SEP			
MAR				08...	1050	1650	17.0
11...	1140	3000	6.0				
APR							
14...	1245	2800	9.5				

LA PLATA COUNTY

370122107522700 NB 32- 9-18BBB. B. Coburn. Drilled stock water-table well in Naciemento Formation. Diameter, 6 in (0.2 m). Depth, 138 ft (42.1 m). MP, 0.3 ft (0.1 m) above lsd. Altitude of land surface, 5,980 ft (1,822.7 m). Records available: 1973-80.

Highest water level, 19.18 ft (5.9 m) below lsd, Aug. 26, 1976; lowest water level, 27.3 ft (8.3 m) below lsd, Apr. 30, 1974.

Aug. 13, 1980   19.18 ft

MOFFAT COUNTY

403040107420801 SB 7-92-34DBD. J. Herod. Drilled domestic water-table well in Browns Park Formation. Diameter, 5 in (0.1 m). Depth, 190 ft (57.9 m). MP, 4.0 ft (1.2 m) below lsd. Altitude of land surface, 6,545 ft (1,994.9 m). Records available: 1974-80.

Highest water level, 70.3 ft (21.4 m) below lsd, Feb. 2, 1976; lowest water level, 72.9 ft (22.2 m) below lsd, Nov. 7, 1974.

1980   No measurement

MONTEZUMA COUNTY

370410108583701 NB33-20-25CDC. Ute Indian Tribe. Drilled stock water-table well in Dakota Sandstone. Diameter, 5 in (0.1 m). Depth, 250 ft (76.2 m). MP, 2.0 ft (0.6 m) above lsd. Altitude of land surface, 4,900 ft (1,493.5 m). Records available: 1973-80.

Highest water level, -1.59 ft (+0.48 m) above lsd, Sept. 30, 1975; lowest water level, 52.12 ft (15.5 m) below lsd, Aug. 18,1980.

Aug. 18, 1980   52.12 ft

INDEX

Page

Alva B. Adams tunnel at east portal, near Estes Park, diversions by.... 437,439
Animas River, at Durango.... 408
  at Howardsville.... 406
  near Cedar Hill, NM.... 412

Bear River near Toponas.... 85
Beaver Creek (tributary to San Miguel River) near Norwood, gaging-station record.... 50
  water-quality record.... 51-55
Berthoud Pass ditch at Berthoud Pass, diversions by.... 437,439
Black Sulphur Creek near Rio Blanco, gaging-station record.... 303
  water-quality record.... 304-309
Boreas Pass ditch at Boreas Pass, diversion by.... 437,439
Box Elder Gulch, near Rangely, gaging-station record.... 342
  water-quality record.... 343-349
  tributary, near Rangely, gaging-station record.... 350
    water-quality record.... 351-355
Busk-Ivanhoe tunnel at east portal, near Malta, diversion by.... 438-439

Charles H. Boustead tunnel near Leadville, diversion by.... 438-439
Coal Creek below Little Beaver Creek, water-quality record.... 201-202
Columbine ditch near Fremont Pass, diversion by.... 437,439
Corral Gulch, below Water Gulch, near Rangely, gaging-station record.... 332
  water-quality record.... 333-340
  near Rangely, gaging-station record.... 356
    water-quality record.... 357-365
Cottonwood Gulch near Rio Blanco, gaging-station record.... 254
  water-quality record.... 255-260
Crest-stage partial-record stations.... 440-441
Curtis Creek near Meeker, water-quality record.... 204-205

Dead Horse Creek near Naturita.... 440
Discharge measurements made at miscellaneous sites. 442
Disappointment Creek, near Dove Creek.... 39
  tributary near Slick Rock.... 440
Dolores River, at Bedrock, gaging-station record.... 40
  water-quality record.... 41,42
  at Dolores.... 38
  below Rico.... 37
  near Bedrock, gaging-station record.... 43
    water-quality record.... 44-45
Don La Font ditches 1 and 2 at Piedra Pass, diversion by.... 438-439
Dry Fork near Rangely.... 341

East Fork San Juan River, above Sand Creek, near Pagosa Springs.... 386
  near Pagosa Springs.... 387
East Paradox Creek tributary near Bedrock.... 440
Elk River at Clark.... 87
Elkhead Creek near Elkhead.... 128
Eureka ditch near Flattop Mountain, diversion by.... 437,439
Ewing ditch at Tennessee Pass, diversion by.... 437,439

Florida River, at Bondad.... 411
  below Florida Farmers ditch, near Durango.... 409
Foidel Creek, near Oak Creek, gaging-station record.... 93
  water-quality record.... 94-96
  at mouth, near Oak Creek, gaging-station record.. 97
    water-quality record.... 98-105

Gillam Draw near Rangely.... 440
Grand River ditch at La Poudre Pass, diversion by.. 437,439
Ground-water levels.... 450
Gurley ditch near Norwood.... 48

Page

Harold D. Roberts tunnel at Grant, diversion by.... 437,439
Hartman Draw at Cortez, gaging-station record.... 425
  water-quality record.... 426-427
Hermosa Creek near Hermosa.... 407
Homestake tunnel near Gold Park, diversion by.... 438-439
Hoosier Pass tunnel at Hoosier Pass, diversion by.. 437,439
Horse Draw near Rangely, gaging-station record.... 316
  water-quality record.... 317-318
Horse Draw at mouth, near Rangely, gaging-station record.... 319
  water-quality record.... 320-322
Hubberson Gulch near Hayden, gaging-station record. 115
  water-quality record.... 116-121

Jubb Creek near Axial, gaging-station record.... 152
  water-quality record.... 153-157
Junction Creek near Durango.... 441

La Plata River, at Colorado-New Mexico State line.. 414
  water-quality record.... 415-419
  at Hesperus.... 413
Larkspur Ditch near Marshall Pass, diversion by.... 438-439
Lay Creek tributary near Lay.... 440
Lilylands Canal near Norwood.... 63
Little Navajo River below Little Oso Diversion Dam.... 392
Little Snake River near Baggs, WY, water-quality record.... 176-177
Little Snake River, near Dixon, WY, gaging-station record.... 173
  water-quality record.... 174
  near Lily, gaging-station record.... 178
    water-quality record.... 179-185
  near Slater, gaging-station record.... 169
    water-quality record.... 170-171
  tributary near Great Divide.... 440
Los Pinos River, at La Boca.... 404
  near Bayfield.... 403
Lost Creek near Buford.... 188

McElmo Creek, above Alkali Canyon, near Cortez.... 428
  below Cortez.... 430
  near Colorado-Utah State line, gaging-station record.... 431
    water-quality record.... 432-436
  tributary near Cortez.... 441
Mancos River, below Johnson Canyon, gaging-station record.... 420
  water-quality record.... 421-423
  near Towaoc.... 424
Marvine Creek near Buford.... 189
Maverick Draw near Norwood.... 64
Middle Creek, near Oak Creek, gaging-station record.... 88
  water-quality record.... 89-92
Middle Fork Piedra River near Dyke.... 395
Milk Creek near Thornburgh.... 135
Miscellaneous sites, discharge measurements at.... 442
Moffat water tunnel at east portal, diversion by.... 437,439
Mud Creek near Cortez.... 429

Navajo River, at Banded Peak Ranch, near Chromo.... 390
  at Edith.... 393
  below Oso Diversion Dam.... 391

Observation-well records.... 450

Piceance Creek, above Hunter Creek, near Rio Blanco, gaging-station record.... 291
  water-quality record.... 292-302
  at White River, gaging-station record.... 323
    water-quality record.... 324-331
  below Rio Blanco, gaging-station record.... 219
    water-quality record.... 220-230

451

Page

- Piceance Creek, below Ryan Gulch, near Rio Blanco, gaging-station record.... 310
  - water-quality record.... 311-315
  - tributary, near Rio Blanco, gaging-station record.... 261
    - water-quality record.... 262-271
- Piedra River, near Arboles.... 396
  - Middle Fork, near Dyke.... 395
- Pine River-Weminuche Pass ditch at Weminuche Pass, diversion by.... 438-439
- Pot Creek near Vernal, UT.... 84

- Rio Blanco below diversion dam.... 389

- Salt Creek (tributary to Florida River) near Oxford.... 410
- Saltado Creek near Norwood.... 47
- San Juan River, at Pagosa Springs.... 388
  - East Fork, above Sand Creek, near Pagosa Springs.... 386
  - East Fork, near Pagosa Springs.... 387
  - near Carracas.... 394
- San Miguel River, at Naturita, gaging-station record.... 65
  - water-quality record.... 66-71
  - at Uravan.... 72
  - below Uravan, water-quality record.... 73-74
  - near Placerville.... 46
- Scandard Gulch, at mouth, near Rio Blanco, gaging-station record.... 275
  - water-quality record.... 276-278
  - near Rio Blanco, gaging-station record.... 272
    - water-quality record.... 273-274
- Slater Fork near Slater.... 172
- Sorghum Gulch, at mouth, near Rio Blanco, gaging-station record.... 250
  - water-quality record.... 251-253
  - near Rio Blanco, gaging-station record.... 247
    - water-quality record.... 248-249
- Specific conductance and temperature data at selected sites.... 443-449
- Spring Creek at La Boca.... 405
- Stewart Gulch, above West Fork, near Rio Blanco, gaging-station record.... 232
  - water-quality record.... 233-239
  - Middle Fork, near Rio Blanco, gaging-station record.... 231
    - water-quality record.... 231
  - West Fork, at mouth, near Rio Blanco, gaging-station record.... 243
    - water-quality record.... 244-246
    - near Rio Blanco, gaging-station record.... 240
      - water-quality record.... 241-242
- Stokes Gulch near Hayden, gaging-station record.... 122
  - water-quality record.... 123-127

- Tabor ditch at Spring Creek Pass, diversion by.... 438-439
- Tarbell ditch near Cochetopa Pass, diversion by.... 438-439
- Taylor Creek at mouth, near Axial, gaging-station record.... 136
  - water-quality record.... 137-141
- Transmountain diversions from Colorado River basin in Colorado.... 437-439
- Treasure Pass diversion ditch at Wolf Creek Pass, diversion by.... 438-439
- Twin Lakes tunnel at east portal, near Twin Lakes, diversion by.... 438-439

Page

- Vallecito Creek near Bayfield, gaging-station record.... 397
  - water-quality record.... 398-401
- Vallecito Reservoir near Bayfield.... 402
- Vermillion Creek, near Hiawatha, gaging-station record.... 75
  - water-quality record.... 76-78
  - at Ink Springs Ranch, gaging-station record.... 79
    - water-quality record.... 80-83
- Vidler tunnel, diversion by.... 437,439

- Wagonwheel Creek at Budge's Resort.... 192
- Walton Creek near Steamboat Springs.... 440
- Watering Trough Gulch near Hayden, gaging-station record.... 109
  - water-quality records.... 110-114
- Weminuche Pass ditch at Weminuche Pass, diversion by.... 438-439
- West Beaver Creek near Norwood.... 49
- West Creek tributary near Gateway.... 440
- West Naturita Creek, at upper station, near Norwood.... 56
  - near Norwood, gaging-station record.... 57
    - water-quality record.... 58-62
- West Twin Wash near Dinosaur.... 441
- White River, above Coal Creek, gaging-station record.... 196
  - water-quality record.... 197-200
  - above Rangely, gaging-station record.... 375
    - water-quality record.... 376-378
  - at Meeker, gaging-station record.... 206
    - water-quality record.... 207-210
  - below Meeker, gaging-station record.... 211
    - water-quality record.... 212-218
  - near CO-UT State line, gaging-station record.... 379
    - water-quality record.... 380-385
  - near Meeker.... 203
  - North Fork, at Buford.... 190
  - South Fork, at Budge's Resort.... 191
  - South Fork, at Buford.... 195
  - South Fork, near Budge's Resort.... 193
  - South Fork, near Buford.... 194
- Williams Creek-Squaw Pass ditch at Squaw Pass, diversion by.... 438-439
- Williams Fork (tributary to Yampa River), at mouth, near Hamilton, water-quality record.... 133-134
- Willow Creek (tributary to Little Snake River) near Dixon, WY.... 175
- Willow Creek (tributary to Piceance Creek) near Rio Blanco, gaging-station record.... 279
  - water-quality record.... 280-290
- Wilson Creek near Axial, gaging-station record.... 142
  - water-quality record.... 143-151
- Wurtz ditch near Tennessee Pass, diversion by.... 438-439

- Yampa River, at Steamboat Springs.... 86
  - below Craig, water-quality record.... 131-132
  - below Elkhead Creek, near Craig, water-quality record.... 129-130
  - below diversion, near Hayden, gaging-station record.... 106
    - water-quality record.... 107-108
  - below Little Snake River, water-quality record.... 186-187
  - near Maybell, gaging-station record.... 158
    - water-quality record.... 159-168
- Yellow Creek, near White River, gaging-station record.... 366
  - water-quality record.... 367-374

✩ U. S. GOVERNMENT PRINTING OFFICE 1982 - 577-764/145 Reg. 8

October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons